* NOTICES *

1. This document has been translated by computer.So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] The physical distribution cost management method of the customer root which consists of two or more transportation paths which are characterized by providing the following, and which embraced two or more transportation stages of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer. Transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand. Physical distribution cost data. Payment information data to a transportation operating personnel used for paying. The last transportation path information data in which it is shown whether it is the last transportation path which delivery to a consumer completed.
[Claim 2] In a claim 1, convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer. Two or more different customer roots are managed, and the delivery terms specified by a consumer can be satisfied. and the transporter system of each transportation path is stabilized, and it is established, and the sum total covering the whole customer root of physical distribution cost [fewer] In the case of offer of the aforementioned customer root information data which discriminate as the standard customer root and are made according to specification by the key according to transportation well informed person, the one customer root in two or more aforementioned customer roots The physical distribution cost management method characterized by offering two or more aforementioned customer root information on the customer root which was specified by this key according to transportation well informed person, and which is the aforementioned standard customer root of transportation from transportation object dispatch-origin to a consumer, and the customer root which is not the aforementioned standard customer root.
[Claim 3] The physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys the transportation object which is characterized by providing the following, and whose order was received in the operating section from a shipping agency to the last place of delivery of a consumer. Transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand. Physical distribution cost data. Payment information data to a transportation operating personnel used for paying. The last transportation path information data in which the last transportation path which delivery to a consumer completed is shown.
[Claim 4] The physical distribution cost management method characterized by attaining communalization of the aforementioned physical distribution key, the aforementioned operating key, and the aforementioned transportation path connection key by the primary transportation from a shipping agency to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer in consideration of the relay station which exists in a claim 3 in the middle of the customer root which conveys a transportation object from a shipping agency to the last place of delivery of a consumer.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] The path to which this invention conveys a transportation object from a shipping agency to the last place of delivery of a consumer, The physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages is started. While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was especially received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down about required information and aiming at curtailment of physical distribution cost, it is related with the physical distribution cost management method which can aim at the effort for managing physical distribution business, and curtailment of costs.
[0002]
[Description of the Prior Art] Synthetic physical distribution cost including the costs which transportation to the last place of delivery of a consumer (or customer) of transportation physical distributions, such as a product whose order was received in the operating section, takes, the administrative expenses of the relay station which keeps a transportation object temporarily in the middle of a transportation path, etc. cannot be disregarded.
[0003] For example, the steel industry starts first in the physical distribution cost which transportation into the works of a raw material takes, and requires the physical distribution cost which raw material acceptance in works and transportation of the half-finished products in works take. For example, each stage of the molten iron in works, molten steel, ****, half-finished products, and a rolling object and the process carried in to a warehouse in the state of a product take many in-the-hall transportation. Moreover, the product carried in to the warehouse is conveyed to the last place of delivery of a consumer, after conveying to the relay station arranged at overseas or the domestic key point.
[0004] Thus, there is much physical distribution process from transportation into the works of a raw material to the last place of delivery of a consumer, and the steel industry takes many physical distribution cost. Especially the transportation object of the steel industry is a heavy lift, and is large also at this point. [of the burden of physical distribution cost] Moreover, the configuration of the product of the steel industry is [the shape of a tabular, a cylinder, and a coil etc.] also various. moreover, the size of a product -- size -- it is various Therefore, since the configuration and the size are colorful in this way, the demand to transportation is also various. In order to satisfy such a demand, while securing the staff who has a variety of handling devices for transportation, a transportation means, and special skill and requiring physical distribution cost, much time and effort is this thing.
[0005] Moreover, it takes out from the warehouse of works, and various transportation stages (it is also henceforth called a transportation path) exist in process in which a product is conveyed to the last place of delivery of a consumer through relay station, for example, ** and two or more transportation stages, such as each marine transportation stage, such as a transportation stage, cargo boats, ferries, etc. of each land, such as a freight car, and a truck, a trailer, exist.
[0006] Conventionally, in all the paths (the customer root is called henceforth) of transportation from a shipping agency to the last place of delivery of a consumer, it pays in each transportation stage (each transportation path), and the bill is dealt with.
[0007] For example, two or more transportation [process / in which a raw material is conveyed to works] stage exists. Moreover, the transportation stage of various gestalten exists also in works. Furthermore, it ships from works and many transportation stages exist also in the process conveyed to the last place of delivery of a consumer through relay station. A large number including relay-station administrative expenses etc. pay for every transportation stage of such a large number, and the handling of a bill and the handling of payment business are made.
[0008]
[Problem(s) to be Solved by the Invention] Thus, in the former, since it pays for two or more transportation stage of every in the customer root, and a bill was treated, it paid and business was made, there was a problem that grasp of physical distribution cost was difficult.
[0009] Moreover, in between [after carrying in a raw material to works until it finally conveys to the last place of delivery of a consumer], since the information on various gestalten, such as information which business manages, information which works manage, and information which a head office physical distribution section manages, existed, it was difficult to share the information about physical distribution cost between business, works, and a head office physical distribution section. For example, in these business, works, and a head office physical distribution section, the handling of a code number which corresponds to the order form, operating form, and physical distribution form of the operation gestalt which the key information which discriminates a transportation object differs in many cases, for example, is mentioned later also differs in many cases mutually. Also at such a point, share-ization of the physical distribution cost information on each section, such as business, and works, a head office physical distribution section, is made difficult. For example, it may be unable to refer for the information on the physical distribution cost currently dealt with by the specific management key by the works and head

office physical distribution section side by the management key by the side of business.
[0010] For this reason, grasp of synthetic physical distribution cost until it reaches the last place of delivery of a consumer will be difficult. Therefore, it will also be difficult to aim at curtailment of whole company-physical distribution cost by analyzing and managing such physical distribution cost. For example, it is difficult to offer the physical distribution which transportation was stabilized, and it was made, and the cheaper customer root of physical distribution cost was set up as the standard root, was more cheap, and was stabilized. Moreover, another new customer root will be compared to the already set-up standard root, and it will be difficult to consider change, improvement, etc. of such the standard root in respect of physical distribution cost etc.
[0011] Transportation of the transportation object whose order was made for this invention to solve the aforementioned conventional trouble, and was received in the operating section, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, it aims at offering the physical distribution cost management method which can aim at the effort for managing physical distribution business, and curtailment of costs.
[0012]
[Means for Solving the Problem] First, the physical distribution cost management method of the 1st invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which it is shown whether it is the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel used for paying In case the customer root information data for grasping the aforementioned customer root are created First, find out the aforementioned last transportation path which delivery to a consumer completed, and the customer root which results in this last transportation path is made into the information trace customer root. The transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path whose key according to transportation well informed person corresponds, and correspond While connecting pursuing from the aforementioned last transportation path one by one to the upstream of a transportation path and creating the root trace information data of this information trace customer root based on the aforementioned source data Collecting the information about the physical distribution cost of this information trace customer root from the aforementioned source data The aforementioned technical problem is attained by creating a customer root physical distribution cost data, and creating customer root information data from these roots trace information data and a customer root physical distribution cost data.
[0013] Moreover, in the physical distribution cost management method of the 1st invention of the above, convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer. Two or more different customer roots are managed, and the delivery terms specified by a consumer can be satisfied. and the transporter system of each transportation path is stabilized, and it is established, and the sum total covering the whole customer root of physical distribution cost [fewer] In the case of offer of the aforementioned customer root information data which discriminate as the standard customer root and are made according to specification by the key according to transportation well informed person, the one customer root in two or more aforementioned customer roots The customer root which was specified by this key according to transportation well informed person and which is the aforementioned standard customer root of transportation from transportation object dispatch-origin to a consumer, While attaining the aforementioned technical problem by having offered two or more aforementioned customer root information on the customer root which is not the aforementioned standard customer root, facilities are given more to analysis, such as finding out the better customer root in respect of physical distribution cost etc., and management.
[0014] On the other hand, the physical distribution cost management method of the 2nd invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys the transportation object whose order was received in the operating section from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel used for paying is shown The physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel from these source data, By while cutting down the aforementioned payment information data for the physical-distribution-management database which has the operating key which gave facilities to the information retrieval of a operating operating personnel, and a transportation path connection key, and having made it create, cutting down the information which shows the kind of transportation object The physical distribution cost management method which can attain the aforementioned technical problem and which nearby arrangement was carried out, and cut down or decreased about required information is offered.
[0015] The relay station which exists in the physical distribution cost management method of the 2nd invention of the above in the middle of the customer root which conveys a transportation object from a shipping agency to the last place of delivery of a consumer is taken into consideration. Moreover, the primary transportation from a shipping agency to relay station, While attaining the aforementioned technical problem by having attained communalization of the aforementioned physical distribution key, the aforementioned operating key, and the aforementioned transportation path connection key by the secondary transportation from relay station to the last place of delivery of a consumer, arrangement and curtailment, or reduction of required information is aimed at further.
[0016] Hereafter, an operation of the 1st invention of the above and an operation of the 2nd invention of the above are explained to this order.

[0017] First, in the 1st invention of the above, while enabling it to offer consistently the information about all the customer roots of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer, offer also of the information about the physical distribution cost of this customer root is enabled further simultaneously.
[0018] There are transportation path data which have from the former the key according to transportation well informed person and transportation path connection key which are dealt with for every transportation path, a physical distribution cost data, payment information data to a transportation operating personnel used for paying. This is because an transportation cost pays, and a bill is managed, or it pays for every transportation path and business is performed from the former. In the 1st invention of the above, to many data for such every transportation path, further, an applicable transportation path adds the last transportation path information data in which it is shown whether it is the last transportation path with which delivery to a consumer is completed, and is considering as source data. That is, the above-mentioned transportation path data, the physical distribution cost data, and the thing that pays and contains the last transportation path information data in addition to information data are called source data.
[0019] Here, the above-mentioned key according to transportation well informed person is for discriminating a transportation object. A physical distribution key and a operating key are contained in this key according to transportation well informed person, for example like the operation gestalt mentioned later.
[0020] For example, the physical distribution key mentioned later includes the information which discriminates works, the information called the physical distribution form which discriminates a transportation object, and the information which shows the last place of delivery of a transportation object, and the kind of transportation object is not only discriminable, but it can discriminate the transportation object of the same kind in a transport process mutually by the difference of the place of delivery etc.
[0021] Moreover, the information concerning a consumer so that it may mention later about a operating key, It has the information called the operating form which shows the kind of transportation object, and the information which shows the operating window which placed an order for the transportation object. The kind of target transportation object is not only discriminable, but the transportation object of the same form in a transport process is mutually distinguishable from the information about a consumer, the information about a operating window, etc. like the above-mentioned physical distribution key.
[0022] The above-mentioned transportation path connection key is information which shows the connection relation of each transportation path which constitutes the customer root. As mentioned above, the customer root is constituted by two or more transportation paths, for example, consists of transportation paths of various transportation stages, such as a transportation path of rail and road transportation by the truck, and a transportation path of the ocean transportation by the cargo boat. A transportation path connection key needs the information on the transportation path connection key which shows the connection relation of such each transportation path, and is shown with the operation gestalt mentioned later by each transportation path PA-PJ in the root trace information data of drawing 7 or drawing 8 etc.
[0023] The information on the transportation path connection key of transportation path PA-PJ of this operation gestalt is constituted by the information about the partition of whether they are the information about leaving-the-garage facilities, the information about a loading port, the information about a discharging port, the information that shows the partition of whether to be being [it / primary transportation] the secondary transportation, and "****", or to be "manufacture." For example, a connection relation with other transportation paths which adjoin on the customer root can be grasped using the information about a loading port, or the information about a discharging port.
[0024] The above-mentioned physical distribution cost data is information which shows the physical distribution cost in each transportation path. You may include the costs paid to a carrier, the costs for maintaining the relay station which keeps a transportation object temporarily which may include the costs generated in the company, or are in the process from a shipping agency to the last place of delivery of a consumer in this physical distribution cost.
[0025] The above-mentioned pays and information data are the information for actually paying the generated physical distribution cost to a transportation operating personnel. It pays and this information that pays for information data, for example and shows a gestalt etc. to them is included.
[0026] Here, in case the customer root information data for grasping the customer root which conveys a transportation object from a shipping agency to a consumer in the 1st invention of the above, i.e., the information for showing so that the customer root can be grasped consistently as mentioned above, are created, the transportation path (the last transportation path) which delivery to a consumer completed is first found out using the aforementioned last transportation path information data. Here, the customer root which results in this last transportation path is defined as the information trace customer root. Next, the transportation path with which the two following conditions are satisfied is considered as the last transportation path, and it connects, pursuing from this transportation path one by one to the upstream of a transportation path. Moreover, a transportation path is connected, connecting one by one in this way, and the root trace information data of the customer root are created based on the above-mentioned source data.
[0027] (1) The 1st condition : the key according to this transportation well informed person agrees. For example, a physical distribution key and a operating key agree with the operation gestalt mentioned later.
[0028] (2) The 2nd condition : the discharging port of a front transportation path and the loading port of a post-transportation path agree.
[0029] Next, in the 1st invention of the above, a customer root physical distribution cost data is created, collecting the information about the physical distribution cost of the above information trace customer roots from the above source data.
[0030] Moreover, customer root information data are created from the above-mentioned root trace information data and this customer root physical distribution cost data. If such customer root information data are obtained, the customer roots to the last place of delivery of a consumer can be covered [no], grasp of the consistent customer roots, such as via what transportation path to go, can come out as much as possible, and the information on the physical distribution cost about this customer root can also be offered. Therefore, the grasp of synthetic physical distribution cost about such the whole customer root becomes easier.
[0031] For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to

the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0032] In addition, although the 1st invention of the above is not limited to this, you may make it introduce the view of the standard customer root. That is, two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer are managed. Moreover, the customer root which satisfies the following conditions among such two or more customer roots is discriminated as the standard customer root.
[0033] (1) The 1st condition : the delivery terms specified by a consumer are satisfying.
[0034] (2) The 2nd condition : the transporter system of the transportation path which constitutes the customer root concerned should be stabilized, and be established.
[0035] (3) The 3rd condition : the sum total covering the whole customer root concerned of physical distribution cost should be the fewer or fewer one compared with other customer roots.
[0036] The view of such the standard customer root is introduced. In the case of the above offers of customer root information data namely, in the case of offer of the customer root information data made according to specification by the key according to transportation well informed person It is made to perform offer with two or more customer roots of transportation from dispatch-transportation object specified by this key according to transportation well informed person origin to a consumer, the customer root which is the especially above-mentioned standard customer root, and the customer root besides the standard which is not the above-mentioned customer root.
[0037] Thus, it can make it possible to grasp more easily the difference among two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer by introducing the view of the standard customer root. for example, -- usually -- the standard customer root -- using -- **** -- it is made like Moreover, if this customer root is compared with the above-mentioned standard customer root when the desirable customer root is able to be found out by a certain opportunity, evaluation by fields, such as evaluation of the found-out customer root concerned, for example, physical distribution cost etc., can be performed more easily. And when it becomes clear that this evaluated customer root is superior to the standard customer root in this time, the customer root concerned can also be used as the standard customer root from next time.
[0038] In addition, when the physical distribution cost of the actual result at the time of comparing the specific standard customer root with the other customer roots in this way varies, you may carry out actual result collection of the physical distribution cost of these standard customer root and the customer roots other than this in the periods during a predetermined period, for example, three months, etc. The more excellent customer root can be chosen as the standard customer root based on the actual result collection made in this way.
[0039] Next, an operation of the 2nd invention of the above is explained.
[0040] Although not limited to this, **** 2 invention needs to deal with much data, when [, such as a case of the 1st invention of the above,] showing the information covering all the customer roots to the last place of delivery of a consumer. Under the present circumstances, it not only constitutes such data in an optimum more, but it can aim at unnecessary or curtailment of the storage capacity of equipment which it not only can improve the efficiency of the processing which relates to for example, the 1st invention of the above by excluding data without use frequency, but performs such processing.
[0041] For this reason, **** 2 invention is considering the composition of the information and data which are used for a physical distribution cost management method. Moreover, in such a physical distribution cost management method, the point that arrange a transportation means or reference and grasp of physical distribution cost are made not only for the physical distribution section which performs various business about this but for a operating section [which placed an order for the transportation object], and works side is noted. Moreover, it considers also about the content of the source data which it generally has from the former.
[0042] First, as the 1st invention of the above generally also made reference as a certain source data from the former, there are transportation path data which have the key according to transportation well informed person and transportation path connection key for every transportation path, a physical distribution cost data, and payment information data to a transportation operating personnel used for paying. In addition to these data, by **** 2 invention, it is premised on the source data containing the last transportation path information data which were mentioned above.
[0043] In consideration of use frequency, reference efficiency, etc., the physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel, and the operating key which gave facilities to the information retrieval of a operating operating personnel are generated from such source data especially by **** 2 invention. Moreover, in addition to these physical distribution key and a operating key, the physical-distribution-management database which has a transportation path connection key is created. Moreover, in the case of creation of this physical-distribution-management database, while paying and cutting down information data, the information in the above source data which shows the kind of transportation object is decreased more.
[0044] Since the amount of data with which the physical-distribution-management database concerned is equipped is cut down by this, it not only can reduce storage capacity, but it can improve the processing speed in the case of the information retrieval by the physical distribution operating personnel, the operating operating personnel, and the person in charge of works.
[0045] In addition, with the information which shows the kind of the above-mentioned transportation object, an "order form", a "operating form", a "physical distribution form", etc. correspond in the operation gestalt mentioned later.
[0046] According to **** 2 invention, the information superior to the time's of realizing a physical distribution cost management method can be constituted as explained above. For this reason, unnecessary information can also be cut down and the storage capacity of a means to memorize information can be stopped. Furthermore, the processing efficiency at the time of offering information can also be improved. For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be

carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0047] In addition, although **** 2 invention is not limited to this, it may take into consideration the relay station which exists in the middle of the customer root. This relay station is process in which a transportation object is conveyed to the last place of delivery of a consumer, and is a place which keeps a transportation object temporarily. Such relay station is prepared in an every place region with a consumer, or the key point on the way of transportation, is a thing and is arranged for the purpose of reservation of the time for delivery to a consumer etc. When preparing such relay station, generally, it may consider as the jurisdiction by the side of works before relay station, and may consider after relay station as jurisdiction of a operating section etc. Thus, if jurisdiction differs, the key information for generally searching the information about a transportation object may differ. However, in case relay station is taken into consideration in this way in **** 2 invention, you may make it attain communalization of the physical distribution key mentioned above, a operating key, and a transportation path connection key by the primary transportation from a shipping agency to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Thus, if communalization is attained, relay-station order cannot be asked but information retrieval of a physical distribution operating personnel can also be performed both more easily [the information retrieval of a operating operating personnel].
[0048] In addition, about **** 2 invention, the transportation path connection key, physical distribution key, and operating key which were mentioned above are not limited in detail. For example, the information which distinguishes the information which shows distinction of whether to be "****" and "manufacture" about the above-mentioned transportation path connection key, the information which shows the loading port of a transportation object, the information which shows a discharging port, the information which shows leaving-the-garage facilities, and primary transportation and secondary transportation may constitute. For example, the information which shows the works which ship the above-mentioned physical distribution key, the information on a physical distribution form which shows the form of a transportation object, and the information about a transportation means to use, for example, the information about truck line distance or transportation facilities, may constitute. Moreover, the information which shows the consumer which placed an order for the transportation object, the information which shows the operating window which dealt with this order, and the information on a operating form which shows the target kind of transportation object may also constitute the operating key mentioned above. Although both the above-mentioned physical distribution forms and operating forms show the kind of target transportation object here, you may set up suitable for information retrieval from a operating section suitable for information retrieval from a physical distribution section, respectively.
[0049]
[Embodiments of the Invention] Hereafter, the operation gestalt of the physical distribution cost managerial system with which the 1st invention of the above and the 2nd invention of the above were applied is explained in detail using drawing.
[0050] First, the premise of the physical distribution cost managerial system of this operation gestalt is explained.
[0051] Severity of in recent years physical distribution environment has been increasing more the correspondence to the problem and global environment problems of a labor shortage etc. Considering coping with it to these, it is expected that future physical distribution cost increases increasingly.
[0052] On the other hand, reduction of physical distribution cost is approached at the limitation by the conventional "rationalization inside the physical distribution section for the made product." Therefore, it is necessary to consider as the object of a cost cut of physical distribution cost [before product manufacture (for example, the raw material stage of a product)], and reduction of the physical distribution cost with which sale / production section was united is needed.
[0053] For reduction of such physical distribution cost, it becomes important to work on sale / production section and to cut down physical distribution cost. For this reason, the aim of the physical distribution cost managerial system of this operation gestalt is as follows.
[0054] (1) A selling section enables it to perform the operating activities in consideration of physical distribution cost. For that, a operating section is easily obtained in the information about the physical distribution cost according to customer root.
[0055] (2) In case a physical distribution section decides upon profit planning, enable it to grasp physical distribution cost information more easily at various cut ends (a form, transportation facilities or a transportation area, etc.).
[0056] Here, an object [gestalt / operation / this] is a physical distribution in the steel industry, and it can be classified as follows.
[0057] (1) The classification according to the kind of transportation object : a raw material physical distribution, a molten-iron physical distribution, a steel-manufacture physical distribution, a half-finished-products physical distribution, a product physical distribution, a recovery physical distribution.
[0058] (2) The classification of the physical distribution the physical distribution in an iron mill, or outside an iron mill : the physical distribution in works, the physical distribution outside works.
[0059] (3) The classification by the classification on accounting : **** expense, a manufacturing cost.
[0060] In the above classifications, classification with **** expense and a manufacturing cost is enabled for the product physical distribution with this operation gestalt for the physical distribution in an iron mill, and the physical distribution outside an iron mill. Here, in the classification by the kind of transportation object, other portions except a product physical distribution are managed at each works, respectively, and the analysis of physical distribution cost in the hall is possible for them. Therefore, if the physical distribution cost about a product physical distribution is grasped in this way, it comes to be able to perform management of whole company physical distribution cost [-like in common].
[0061] Here, when a product physical distribution is considered, it can classify into an in-the-hall physical distribution, the primary transportation from works to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Here, about the portion of an in-the-hall physical distribution, the data of an in-the-hall physical distribution system (sign 13 of drawing 1) are made into source data. On the other hand, about the outside-the-hall physical distribution, about primary transportation, the data of a primary transportation cost payment system (sign 15 of drawing 1) are made into source data, and the data of a secondary transportation cost payment system (sign 16 of drawing 1) are made into source data about secondary transportation.
[0062] As transportation facilities set as the object of primary transportation, a coaster, a truck, a small vessel, **, a freight

car, etc. are colorful, and fee calculation also changes with each transportation facilities. On the other hand, as secondary transportation, fee calculation is performed for every work of the cargo work after relay-station warehousing, storage, and delivery. Therefore, data not only are distributing in two or more databases, but the handling units of each data differ in the primary transportation cost payment system or the secondary transportation cost payment system. That is, primary transportation is an invoice unit for every transportation path of each transportation stage. About secondary transportation, it is the leaving-the-garage vote unit of the last delivery to the last place of delivery of a consumer. Therefore, compared with primary transportation, the data of the secondary transportation which covers the last delivery of a handling unit are more finer. In addition, about the in-the-hall physical distribution, the data about a physical distribution are dealt with per form, and incorporate and use this also with this operation gestalt.
[0063] The fundamental view of construction here of the physical distribution cost management method of this operation gestalt is the following four points.
[0064] (1) :in the hall [which is consistent and grasps the product transportation including primary transportation and secondary transportation about in the hall, outside the room, and outside the room] -- setting -- primary transportation outside the hall -- setting -- moreover, secondary transportation outside the hall -- setting -- etc. -- the whereabouts is distributing the actual result data about a physical distribution, and the timing of transportation also differs In addition, when processing is added at a transportation place, a configuration and a form also change. For this reason, it was difficult to be conventionally consistent and to grasp from factory shipments to the last place of delivery of a consumer.
[0065] (2) Grasp of the physical distribution cost information according to consumer (an actual result and standard) : the conventional physical distribution cost information is grasped for every management key of a physical distribution section. For this reason, in order for a operating section to grasp physical distribution cost for example, according to a customer, the information on a physical distribution section had to be processed anew. With this operation gestalt, the management key (it is a management key about a marketing department, a group, a customer, etc., and considers as a operating key) which gave facilities to the information retrieval of the operating personnel of a operating section with the management key (physical distribution key) which gave facilities to the information retrieval of the operating personnel of a physical distribution section is given to the information about the physical distribution cost to treat. For this reason, the physical distribution cost information with which this operation gestalt is equipped can be offered also to a operating section with the gestalt for which were more [more easily and] suitable also as opposed to a physical distribution section.
[0066] (3) Diversification of information offer of the actual result about a physical distribution : when advancing physical distribution increase in efficiency and going, physical distribution cost etc. grasps more easily the actual result of the physical distribution in the present condition from various directions. With this operation gestalt, since various information offer screens (drawing 19 mentioned later - drawing 23) are improved, it excels in this point.
[0067] Hereafter, the composition of the physical distribution cost managerial system of this operation gestalt is explained.
[0068] Drawing 1 is the block diagram showing the composition of the physical distribution cost managerial system of this operation gestalt, and the host system which offers source data to this.
[0069] The composition of the physical distribution cost managerial system 40 of an operation gestalt with which the 1st invention of the above and the 2nd invention of the above were applied is shown by this drawing 1 . Furthermore, the composition of the host system 10 which offers the source data which this physical distribution cost managerial system 40 needs is shown.
[0070] First, the physical distribution cost managerial system 40 consists of a server computing system 42 and many terminal computing systems 51-56. These servers computing system 42 and the terminal computing systems 51-56 are constituted by each on EWS (engineering workstation), and are mutually connected by LAN (local area network)43.
[0071] This LAN43 is Ethernet specifically used abundantly by EWS. the terminal computing systems 51-56 connected by this LAN43 are illustrated depending on the case -- it has six or more sets and is arranged in the head office physical distribution planning department (physical distribution section), head office business (operating section), each branch (it is mainly a operating section and there is also an element of a physical distribution section), the Chiba iron mill, the Mizushima iron mill, and the Chita factory (above, works) Here, two or more terminal computing systems may be arranged in each arrangement place. For example, the head office physical distribution planning department may be equipped with two or more terminal computing systems. Moreover, the terminal computing system 53 is arranged at each of each branch.
[0072] Next, as shown in this drawing 1 , it is constituted by the server computing system 42 with the main part 60 of a computer, and the cost-data base 63 classified by customer root and the profit-planning database 64.
[0073] The main part 60 of a computer updates the data of the profit-planning database 64 while updating the data of the cost-data base 63 classified by customer root based on the source data of the order entry system 12 with which a host system 10 is equipped, the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15, and the secondary transportation cost payment system 16. Download of the source data shown by S1 is specifically performed periodically in (1 time / three months), and download of the source data shown by signs S2 and S3 and S4 is performed periodically [(time / 1 //) month]. Thus, based on the downloaded source data, the main part 60 of a computer performs renewal of the cost-data base 63 classified by customer root, and the profit-planning database 64.
[0074] An operation of the host system 10 of such composition and the physical distribution cost managerial system 40 is explained briefly.
[0075] First, the source data in a host system 10 are periodically downloaded on the main part 60 of a computer of the physical distribution cost managerial system 40. Based on the source data downloaded in this way, the main part 60 of a computer performs the creation and updating of the cost-data base 63 classified by customer root, and the profit-planning database 64 so that it may mention later in detail. Thus, construction of the cost-data base 63 classified by customer root and the profit-planning database 64 constitutes the information offer system (physical distribution cost managerial system) by which the 1st invention of the above and the 2nd invention of the above were applied in the server computing system 42.
[0076] Then, the head office physical distribution planning department of a physical distribution section can acquire the information about the physical distribution cost of a request required as a physical distribution operating personnel from the server computing system 42 using the terminal computing system 51. In the branch which is similarly a operating section, this Shamoto business of a operating section can acquire the information about physical distribution cost characteristic as a

operating operating personnel from the server computing system 42 using the terminal computing system 53 using the terminal computing system 52. Moreover, the Chiba iron mill, the Mizushima iron mill, and the Chita factory which become a works side can acquire the information about physical distribution cost peculiar to a works side from the server computing system 42 using the terminal computing systems 54-56, respectively.

[0077] Then, it explains in more detail about the source data which the physical distribution cost managerial system 40 with which the above-mentioned host system 10 is equipped uses.

[0078] First, the source data with which a host system 10 is equipped especially which the physical distribution cost managerial system 40 needs have in principle composition shown in the following table. That is, source data are constituted by the key item KA and the data-division part DA. Moreover, the key item KA is paid with the physical distribution key KA1 as shown in the following table, the operating key KA2, and the connection key KA3, and is constituted by the key KA4. Moreover, about the data-division part DA, it is constituted with the data DA 1 equipped with weight information and cost information.

[0079]

[Table 1]

原始データ

KA：キー項目	KA1：物流キー（工場、物流品種、最終受渡場所）
	KA2：営業キー（需要家、営業窓口、営業品種）
	KA3：接続キー（出庫便、積地、揚地、1次2次輸送区分、販直／製造区分）
	KA4：支払キー 1次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件） 2次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件、入庫便、船名、置場）
DA：データ部分	DA1：重量情報、費用情報

[0080] In the source data mentioned above, especially the source data that are in the primary transportation cost payment system 15, and are used with the physical distribution cost managerial system 40 are constituted by the amount of [the key item KB and / DB] data division, as shown in the following table. Furthermore, the key item KB is paid with the physical distribution key KB1 as shown in the following table, the operating key KB2, and the connection key KB3, and is constituted by the key KB4. Moreover, the amount of [DB] data division have the data DB1 about delivery facilities. Here, about such source data of the primary transportation cost payment system 15, the loading port of the connection key KB3 turns into a place of shipment, and a discharging port serves as the place of delivery.

[0081]

[Table 2]

1次輸送費支払システム

KB：キー項目	KB1：物流キー	工場、物流品種、最終受渡場所
	KB2：営業キー	需要家、営業窓口、営業品種
	KB3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便
	KB4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件
DB：データ部分	DB1：配達便｛配達重量、配達費用（基本費用、その他費用）｝	

[0082] Next, the source data with which the secondary transportation cost payment system 16 is equipped and which the physical distribution cost managerial system 40 uses are constituted by the key item KC and the data-division part DC as shown in the following table. Moreover, the key item KC is paid with the physical distribution key KC1 as shown in the following table, the operating key KC2, and the connection key KC3, and is constituted by the key KC4. Moreover, about the data-division part DC, it has the data DC 1 in which the fixed cost about cargo work as shown in the following table, storage, delivery, maintenance of relay station, etc. is shown. In addition, by the connection key KC3 in the source data of the secondary transportation cost payment system 16, a loading port shows relay station, and a discharging port shows the place of delivery by it.

[0083]

[Table 3]

2次輸送費支払システム

KC：キー項目	KC1：物流キー	工場、物流品種、最終受渡場所
	KC2：営業キー	需要家、営業窓口、営業品種
	KC3：接続キー	販直／製造区分、積地（＝中継基地）、揚地（＝受渡場所）、出庫便
	KC4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件、船名、置場、入庫便
DC：データ部分	DC1：……	｛荷役重量、荷役費用（基本費用、その他費用）｝
	……	｛保管重量、保管費用（基本費用、その他費用）｝
	……	｛配達重量、配達費用（基本費用、その他費用）｝
	……	｛固定費用｝

[0084] Next, the data memorized by each database of the physical distribution cost managerial system 40 of this operation gestalt created based on the source data stated above are explained.

[0085] First, as shown in the following table, the data memorized at the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt have the following composition. That is, the data memorized at the cost-data base 63 classified by customer root are first constituted by the key item KD and the data-division part DD. Moreover, it is constituted by the physical distribution key KD1 as shown in the following table, the operating key KD2, and the connection key KD3 about the key item KD. About the data-division part DD, it is constituted with the data DD 1 about primary transportation, and the data DD 2 about secondary transportation.
[0086]
[Table 4]
物流コスト管理システム（顧客ルート別コストデータベース）

KD：キー項目	KD1：物流キー	工場、物流品種（小分類・大分類）、 最終受渡場所
	KD2：営業キー	需要家、営業窓口、営業品種
	KD3：接続キー	販直／製造区分、積地（＝出荷地）、 揚地（＝受渡場所）、出庫便、 1次2次輸送区分
DD：データ部分	DD1：＜1次輸送＞ 配達便、配達重量、配達費用（基本費用、その他費用）	
	DD2：＜2次輸送＞ 荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用	

[0087] Next, the data memorized by the profit-planning database 64 in the physical distribution cost managerial system 40 serve as composition as shown in the following table. That is, it is constituted by the amount of [the key item KE and / DE] data division. Moreover, the key item KE is constituted by the physical distribution key KE1 as shown in the following table, the operating key KE2, and the connection key KE3. Moreover, about a part for data division DE, it is constituted with the data DE1 about primary transportation, and the data DE2 about secondary transportation.
[0088]
[Table 5]
物流コスト管理システム（利益計画データベース）

KE：キー項目	KE1：物流キー	工場、物流品種（小分類・大分類）、 最終受渡場所
	KE2：営業キー	需要家、営業窓口、営業品種
	KE3：接続キー	販直／製造区分、積地（＝出荷地）、 揚地（＝受渡場所）、出庫便、 1次2次輸送区分
DE：データ部分	DE1：＜1次輸送＞ 配達便、配達重量、配達費用（基本費用、その他費用）	
	DE2：＜2次輸送＞ 荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用	

[0089] Unlike the fundamental source data mentioned above, the source data in the primary transportation cost payment system 15, and the source data in the secondary transportation cost payment system 16, the data KA4, KB4, and KC4 related for paying, for example, payment keys, are excluded by the data in the cost-data base 63 classified by customer root, and the data in the profit-planning database 64 as explained above. At source data, although such data related for paying have a huge amount, since such information related for paying is excluded, in the cost-data base 63 classified by these customer root, or the profit-planning database 64, the processing time which aims at curtailment of storage capacity and reference takes can be shortened.
[0090] Moreover, compared with the physical distribution form and operating form in source data, the classification of the physical distribution form of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt or the profit-planning database 64 or a operating form is made rougher so that it may mention later in detail. For this reason, it not only can decrease the amount of the data in which the physical distribution form and operating form in this operation gestalt are shown, but it can perform reference better.
[0091] Moreover, as compared with mutual, the table showing the data memorized at the cost-data base 63 classified by customer root mentioned above and the table showing the data memorized by the profit-planning database 64 are made the same [the key about primary transportation and the key about secondary transportation] so that clearly. Therefore, it is also possible to search the data about primary transportation and the data about secondary transportation at once, using a common key.
[0092] Next, the generation and updating of the data of the cost-data base 63 classified by customer root or the data of the profit-planning database 64 in this operation gestalt are explained from the source data in a host system 10.
[0093] First, drawing 2 is the diagram showing the data generation and updating of the database of this operation gestalt based on source data .
[0094] In this drawing 2 , a host system 10 memorizes and the fundamental source data 18 used with the physical distribution cost managerial system 40 of this operation gestalt are shown. Moreover, the data memorized at the cost-data base 63 classified by customer root of this operation gestalt and the data memorized by the profit-planning database 64 are shown.

[0095] First, the physical distribution key KD1 memorized at the cost-data base 63 classified by customer root, the operating key KD2, the connection key KD3, the physical distribution key KE1 memorized by the profit-planning database 64, the operating key KE2, and the connection key KE3 are generated or updated based on the physical distribution key Kn1, the operating key Kn2, and the connection key Kn3 of source data 18, respectively. Here, n is B or C.
[0096] Next, a part for the data division DE 1 about the weight information and cost information of the profit-planning database 64 is generated or updated based on a part for the data division Dn 1 about the weight information and cost information of source data 18. On the other hand, the data about the weight information and cost information of the cost-data base 63 classified by customer root are generated based on a part for the data division DE 1 of the profit-planning database 64.
[0097] In addition, the data of the primary transportation cost payment system 15 of a host system 10 used for the generation or updating of the cost-data base 63 classified by customer root in the physical distribution cost managerial system 40 of this operation gestalt and the data of the secondary transportation cost payment system 16 are as follows.
[0098] (1) Customer root information (cost-data base classified by customer root)
The information 1A1. key item 1A1a. physical distribution key from 1 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
1A1b. operating key (a consumer, a operating window, operating form)
1A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1A2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
The information 1B1. key item 1B1a. physical distribution key from 1 transportation-cost [B.secondary] payment system (works, a physical distribution form, the last place of delivery)
1B1b. operating key (a consumer, a operating window, operating form)
1B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1 B-2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
[0099] Moreover, the data of the primary transportation cost payment system 15 of a host system 10 used for the physical distribution cost managerial system's 40 updating or generation of this operation gestalt of the data of the profit-planning database 64 and the data of the secondary transportation cost payment system 16 are as follows.
[0100] (2) Profit-planning information (profit-planning database)
The information 2A1. key item 2A1a. physical distribution key from 2 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
2A1b. operating key (a consumer, a operating window, operating form)
2A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
It is 2A2a. delivery facilities {delivery weight and delivery-charge (basic costs, other costs)} by 2A2. data division.
The information 2B1. key item 2B1a. physical distribution key from 2B. transportation cost [secondary] payment system (works, a physical distribution form, the last place of delivery)
2B1b. operating key (a consumer, a operating window, operating form)
2B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A 2B2. data-division part 2B2a. load weight, cargo work costs (basic costs, other costs)
A 2B2b. storage weight, an inventory carrying cost (basic costs, other costs)
A 2B2c. delivery weight, a delivery charge (basic costs, other costs)
2B2d. fixed costs (maintenance expense of relay station)
[0101] Next, how to generate the data (code) of a operating form and a physical distribution form from the data of an order form in the case of generation of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt and the data of the profit-planning database 64 or updating (code) is explained from source data.
[0102] First, if an order is received from a consumer in the operating section 67 as shown in drawing 3 , order form 67a will be published. This order form 67a is reached at no less than 1000 forms. Then, in the operating section 67, operating form 67b for using the physical distribution cost managerial system 40 of this operation gestalt is generated from order form 67a. This operating form 67b is about 75 forms. Therefore, the ratio (N2:1) of the number of the forms of order form 67a and operating form 67b is about 13.3 (N2 is about 13.3), and can decrease the number of forms or more by 1/13.
[0103] Then, in the physical distribution section 68, physical distribution form 68a for using the physical distribution cost managerial system 40 of this operation gestalt is generated based on order form 67a. This physical distribution form 68a is about 68 forms. Therefore, the ratio (N1:1) of the number of forms of order form 67a and physical distribution form 68a is about 14.7 (N1 is about 14.7), and can cut down the number of forms 1/14 or more.
[0104] In addition, the conversion method of operating form 67b from order form 67a and the conversion method of physical distribution form 68a from order form 67a are as in the following table.
[0105]
[Table 6]

品種コードの変換方法

名称	使用部署	品種の数	変換方法	目的／内容
M1．オーダ品種	営業部門	1000		契約をする際に発番される契約番号の２～４桁で決まる
M2．営業品種	営業部門	７５	オーダ品種と工場コードと国内・輸出区分コードで変換	営業の販売計画の管理レベルに合わせた品種
M3．物流品種	物流部門	６８	オーダ品種と工場コードで変換	物流コストを意識した管理レベルに合わせた品種

[0106] In addition, the order form as shown in drawing 4 has the following composition.
[0107] (1) The code which shows the contract ground domestic outside the country using the contract ground code alphanumeric character of one character.
[0108] (2) The component kind code of a form code (3 figures) = it is as being shown in the 1 of the table of the "order form code" which roll partition (1 figure) + forms (2 figures) are consisted of, and is shown below, and its 2. In addition, the code currently displayed just before each form name of 1 of ******** and its front Naka of 1 expresses the following.
"K" -- "domestic S" -- in-house "Y -- Order entry mechanization non-object [0109]" -- Domestic, in the company, export community "*" -- Export "a blank" (3) consecutive numbers -- under the treaty of [G] a., in case it contracts, it is numbered b. It is considered and numbered so that it may avoid that a number overlaps within a short period of time.
c. A "serial number" may be beforehand divided for the reason of an area, department and section, and others.
d. Grouping of the head number of two or more kinds is carried out, and it is not restricted except for a special case about attaching consecutive numbers.
[0110]
[Table 7]
オーダ品種コード（その１）

ロール区分／品種		圧延製品											
		0		1		2		3		4			
				ニューロール		ニューロール		山売・格外・３級		ニューロール			
厚板	30				極厚鋼板	KS	極厚鋼板 シャー向け耳付	KS					
	31				造船材	KS	造船材 シャー向け耳付	KS	造船乱尺及び切断フラットバー乱尺	KS	切断フラットバー（大板切断品）		
	32				ボイラー材	KS		KS	ボイラー乱尺				
	33				厚板一般材	KS	厚板一般材 シャー向け耳付	KS	厚板一般材乱尺 山売り・３級	KS	厚板一般材 カット・バー		
	34				中板一般材	KS	中板一般材 シャー向け耳付	KS	中板一般材乱尺 山売り・３級	KS	中板カット・バー		
	35				縞鋼板		縞鋼板コイル	KS	縞鋼板・乱尺 山売り・３級				
	36				特殊極厚鋼板	KS	特殊極厚鋼板 シャー向け耳付	KS	特殊極厚鋼板 在庫品				
	37				調質厚鋼板	KS	調質厚鋼板 シャー向け耳付	KS	調質厚鋼板 在庫品	KS	調質鋼カット・バー		
	38				厚板クラッド	KS		KS	厚板クラッド 在庫品				
	39				特殊鋼厚板	KS	特殊鋼厚板 シャー向け耳付	KS	特殊鋼厚板 在庫品	KS	特殊鋼カット・バー		

[0111]
[Table 8]
オーダ品種コード（その２）

ロール / 区分 / 品種		圧延製品			加工品		工事込契約				その他	
		5			6		7		8		9	
		発生品端板短尺										
厚板	30											
	31											鋳鋼
	32											Vプロ
	33		厚板一般材端板		厚板ブランク材							特殊鋼鋳物
	34	K	中板一般材端板 S		中板ブランク材							銅合金鋳物
	35	K S	鏑鋼板端板									
	36				鋼板							鋳鋼ロール
	37											
	38			*	鋼板製高架水槽							
	39			*	その他加工品							鋳鉄鋼組立品

[0112] Operating form 67b changed from order form 67a is in addition, as it is shown in the following table (the 1 of the table of a "operating form code", and its 2). In addition, this order form 67a is another system in domestic, in the company, and export.
[0113]
[Table 9]
営業品種コード（その１）

NO	品種・I 〔国内〕	コード
1	厚中板 （造船材）	01
2	厚中板 （一般材）	03
3	鏑板	06
4	特殊鋼広巾厚板	11
5	特殊鋼中薄板	12
6	特殊鋼帯鋼 （千葉・水島）	14
7	特殊鋼帯鋼 （阪神）	15
8	特殊鋼平鋼	16
9	特殊鋼極厚鋼板	17
10	特殊鋼スラブ （GC）	18

[0114]
[Table 10]
営業品種コード（その２）

NO	品種・I 〔国内〕	コード
11	厚板クラッド	1A
12	ステンレス HOT KE	20
13	ステンレス HOT KK	21
14	ステンレスコールドKE（ZR品）	27
15	ステンレスコールド KK （ZR品）	28
16	ステンレスクラッド	29
17	ステンレスパイプ	2A
18	ステンレスコールド KE （TANDEM品）	2C
19	ステンレスコールド KK （TANDEM品）	2D

[0115] As [show / physical distribution form 68a changed from order form 67a / in addition, / in the following table] (the 1 of the table of a "physical distribution form code", and its 2)
[0116]
[Table 11]

物流品種コード（その１）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
1	厚板	A	1	厚板	A1△△
			2	厚板端板	A2△△
2	熱延	B	3	熱延特殊コイル	B1BB
			4	熱延　コイル	B1△△
			5	熱延特殊薄板	B2BS
			6	熱延特殊厚板	B2BN
			7	熱延　薄板	B2△△
3	冷延	C	8	冷延特殊コイル	C1CB
			9	冷延　コイル	C1△△
			10	冷延特殊薄板	C2CH
			11	冷延　薄板	C2△△
			12	コールド特品	C3△△
4	表面処理	D	13	ブリキ	D1△△
			14	ティンフリー	D2△△
			15	カラートタン	D3△△
			16	亜鉛メッキ	D4△△
			17	溶融亜鉛メッキ	D5△△
			18	電気亜鉛メッキ	D6△△
			19	ジンクロメタル等	D△△△
5	珪素	E	20	珪素	E△△△
6	ステンレス	F	21	ステンレス	F△△△
			22	ステンレス特品	F5△△
7	形鋼	G	23	大形形鋼	GA△△
			24	中形形鋼	GB△△
			25	大形鋼矢板	GC△△
			26	支保工	GE△△
			27	CT形鋼	GH△△
			28	組み合わせ鋼矢板	GT△△
			29	軽量ロールH	GW△△
			30	大形ハイスレンドH	G4△△
			31	中形ハイスレンドH	G6△△
			32	フォークリフトマスト	G5△△
			33	大和H	GZ△△
		（J1）	34	大形フラットバー	J1△△
			35	その他形鋼	G△△△
8	線材	H	36	線材	H△△△
			37	バーインコイル	H2△△
9	棒鋼	J（J1を除く）	38	棒鋼	J△△△

[0117]
[Table 12]

物流品種コード（その２）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
10	シームレス鋼管	K1	39	小径シームレス	KQ△△
			40	小径シームレス塗覆管	KR△△
			41	中径シームレス	KJ△△
			42	中径シームレス塗覆管	KK△△
11	溶鍛接管	K2	43	小径管	KN△△
			44	小径管塗覆管	KP△△
			45	中径管	KG△△
			46	中径管塗覆管	KH△△
			47	鍛接管	KL△△
			48	鍛接塗覆管	KM△△
			49	コラム	KS△△
12	大径管	K3	50	スパイラル	KE△△
			51	スパイラル塗覆管	KF△△
			52	板巻鋼管	KC△△
			53	板巻鋼管塗覆管	KD△△
			54	UOE	KA△△
			55	UOE塗覆管	KB△△
13	鋳鍛鋼	L	56	鋳鍛鋼	L△△△
14	溶接棒	M	57	溶接棒	M△△△
15	鉄粉	N	58	鉄粉	N△△△
16	コルゲート	P	59	コルゲート	P△△△

[0118] In this operation gestalt, the number of forms of operating form 67b changed from order form 67a is cut down by about 1/13 compared with order form 67a as explained above. Moreover, compared with order form 67a, it has dropped to about 1/15 also about the number of forms of physical distribution form 68a changed from order form 67a. Therefore, shortening of the processing time which it not only can reduce storage capacity more, but reference takes it can also be aimed at by cutting down the number of forms in this way.
[0119] Next, generation of the customer root information data made with the physical distribution cost managerial system 40 of this operation gestalt or processing of updating is explained, using a flow chart.
[0120] Drawing 5 is a flow chart which shows creation of the customer root information data made in the physical distribution cost managerial system of this operation gestalt, or processing of updating.
[0121] In this drawing 5 , actual result collection processing is first made at Step 110. This actual result collection processing is performed periodically on a monthly predetermined day. In this actual result collection processing, distribution and incorporation of the download to the physical distribution cost managerial system 40 from the host system 10 as shown in drawing 6 described below, and the data to each database shown in drawing 6 are made.
[0122] Drawing 6 is a block diagram for download of the source data from a host system to each database in the physical distribution cost managerial system of this operation gestalt being shown.
[0123] In this drawing 6 , the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15 and the secondary transportation cost payment system 16 are formed in the host system 10 as mentioned above using drawing 1 . Moreover, in addition to this, the facilities database 26 and the secondary database 28 are formed in the main part 60 of a computer of the server computing system 42 in the physical distribution cost managerial system 40 of this operation gestalt the 25 or primary 24 or primary 21 or primary in-the-hall database ship database truck database.
[0124] Moreover, the source data of the in-the-hall physical distribution system 13 are downloaded to the in-the-hall database 21, and are incorporated. The source data of the primary transportation cost payment system 15 are downloaded to the main part 60 of a computer in the server computing system 42, reach 24 or primary primary ship database truck database 25, in addition to this, can be distributed to either of the facilities databases 26 the 1st order, and are incorporated. The source data of the secondary transportation cost payment system 16 are downloaded to the secondary database 28, and are incorporated.
[0125] Moreover, at this step 110, based on the incorporated source data, it downloads in this way, and the transportation physical distribution discernment key information data shown in the key information on the cost-data base 63 classified by customer root and the profit-planning database 64, i.e., drawing 7 mentioned later and drawing 8 , are generated, and it is shown in these drawing 7 and drawing 8 , especially carries out to some customer root information data.
[0126] Then, at Step 114, it judges whether it is the processing performed once in three months. If this judgment is "Y", it will mean that it was judged with performing processing which should be performed once in three months, and will progress to Step 142 continuously. When judged with "N" at this step 114, it means that it was judged with performing processing performed once in one month, and progresses to Step 118 continuously.
[0127] Then, the master file of the standard customer root is searched with Step 142, and it judges by the item of "the standard / root partition data outside a standard" of the high-order end of drawing 7 or drawing 8 in whether the customer root which conveyed is the standard customer root. The profit-planning database 64 is created at continuing Step 146.
[0128] On the other hand, when judged with "N" at the above-mentioned step 114, root actual result information creation is performed at Step 118. This, using the 24 or primary primary ship database truck database 25 shown in drawing 6 , and the data memorized by the primary facilities database 26 and secondary database 28 in addition to this The data of a transportation path are connected from the data of the last transportation path which delivery to a consumer completed, pursuing one by one to the upstream (works side) of a transportation path, and processing in which even the data of the transportation path which finally leaves works connect is performed. To the flow and reverse of such processing connected while carrying out a sequential trace, i.e., a transportation physical distribution, the data of a transportation path are connected one by one at reverse, and it dies. Such connection conditions are connected pursuing one by one for the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path key information, i.e., a physical distribution key, and whose operating key correspond, and correspond. By such processing, the root trace information data shown in drawing 7 or drawing 8 are obtained.
[0129] At Step 128, it judges whether it is the object of actual result collection of the standard customer root or the customer root outside a standard following this step 118. When judged with there being the root same in the past and it being the object of such actual result collection, it progresses to Step 130 continuously. On the other hand, when judged with it not being the object of actual result collection, it progresses to Step 124, considers as the object of next data accumulate lump, and considers as the object of next actual result collection.
[0130] Here, at Step 152, plan unit price addition is processed after the above-mentioned step 146. Or when it is judged with it being a candidate for actual result collection at the above-mentioned step 128 and progresses to Step 130, processing of actual result unit price addition and the amount addition of actual results is performed.
[0131] Here at these steps 152 and 130 While using key information, i.e., a physical distribution key, and a operating key as a search key, a root configuration item (the partition of facilities, a loading port, a discharging port, primary transportation, or

secondary transportation, ****, or partition of manufacture) is used as a search key. It reaches 24 or primary 21 or primary in-the-hall database ship database truck database shown in drawing 6 25, in addition to this, the primary facilities database 26 and secondary database 28 are searched, and the unit price of each transportation path and the data of a weight are acquired. The edit place of the acquired information (a unit price, weight) is judged from the partition of the partition of facilities, primary transportation, or secondary transportation, ****, or manufacture.

[0132] Here, from the root of one set of a loading port and a discharging port, i.e., one transportation path, a plan unit price calculates the average of an actual result unit price in three months, and is called for. This is called for by carrying out the division of the sum total of the costs collected in three months in the amount similarly collected in three months.

[0133] moreover -- although it is good also as a plan unit price as it is in the actual result unit price for three months called for by doing in this way -- the actual result unit price for such three months -- receiving -- a rate -- the multiplication of the ratio which considered the contents of a cost cut, such as - increase in efficiency, is carried out, and it is good also considering this as a plan unit price a discount the ratio of such a content of a cost cut predicts change of the future actual result unit price for three months, and according to continuation order -- or the price increase element by a certain factor is taken into consideration

[0134] Next, an actual result unit price is called for as an actual result unit price for one month based on actual result collection of the costs for one month made about the root of one set of a loading port and a discharging port, i.e., one transportation path, and actual result collection of the amount for one month. It becomes the actual result unit price required in specifically carrying out the division of the total of costs by which actual result collection was carried out in one month by total of the amount collected in one month calculated as average costs for one month.

[0135] After these steps 152 or processing of 130 is completed, to the customer root information data shown in drawing 7 , plan unit price information data or actual result unit price weight information data can be given, and customer root information data as shown in drawing 8 as a result can be obtained.

[0136] In addition, the processing made at Step 142 of above-mentioned drawing 5 is made as [show / in drawing 9 - drawing 13]. Moreover, the processing made at Step 118 which drawing 5 mentioned above is made as [show / by drawing 14 - drawing 17].

[0137] First, drawing 9 shows the source data made into the object of processing of Step 142, and each transportation path is isolated. First, the 1st transportation path is a transportation path from N1 (works) to N2a (relay station). The 2nd transportation path is a transportation path from N2b (relay station) to N3a (subcontract place). The 3rd continuing transportation path is a transportation path from N3b (subcontract place) to N4 (consumer). Here, each of N2a and N2b shows the same relay station. Moreover, each of N3a and N3b shows the same subcontract place.

[0138] Then, processing of the root connection of a process 1 made at the above-mentioned step 142 is shown by drawing 10 . This processing is performed once in three months. Moreover, processing of this root connection is processing in which connect the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path a physical distribution key and a operating key agree with the 3rd transportation path as the starting point with which the data that it was the last transportation path were given, and correspond one by one, and it finally arrives to shipment works. By such processing, from the 3rd transportation path, all transportation paths are connected, and the customer root which becomes with these transportation path can grasp even the 1st transportation path now consistently.

[0139] Drawing 11 is the process 2 made at Step 142, and judges the customer root besides a standard or a standard. This judgment is performed once periodically in three months. Moreover, this judgment judges. Moreover, such a judgment is made by the comparison with the customer root used as the object used as the actual result, and the root A (standard root) shown in drawing 11 , and comparison with Root B (root outside a standard). Moreover, the transportation gestalt of the standard root and the root outside a standard and comparison of a unit price are performed after such a comparison test. Grasp of the unusual root is made by this. [0140] In addition, this process 2 judges whether it is the standard root about the root information created in the process 1 mentioned above using drawing 10 to the transportation root master in an order entry system.

[0141] In addition, when judged with it being the standard root in the process 2 of this drawing 11 , process 3a shown in drawing 12 is performed. On the other hand, when judged with it being the root outside a standard, process 3b shown in drawing 13 is performed.

[0142] First, process 3a shown in drawing 12 is performed once in Step 142 of above-mentioned drawing 5 in three months, when judged with it being the standard root in a process 2. This process 3a processes cost information addition (plan unit price) to the standard root. This planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, such planned value is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.

[0143] Next, when judged with process 3b shown in drawing 13 being the root outside a standard in the above-mentioned process 2, it is periodically made once at Step 142 of above-mentioned drawing 5 in three months. Moreover, processing of this process 3b is processing of the cost information addition (plan unit price) to the root outside a standard. Moreover, this planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, this is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.

[0144] Then, the processing shown by drawing 14 made at Step 118 of above-mentioned drawing 5 - drawing 17 is explained.

[0145] First, drawing 14 is the same as that of the root connection processing mentioned above in drawing 10 , however is made once periodically in one month. Also about the method of this root connection, or the conditions in this case, it is the same as that of above-mentioned drawing 10 .

[0146] Then, in drawing 15 , it is the judgment of whether it is the standard root made like processing of above-mentioned drawing 11 , or to be the root outside a standard. As processing of drawing 11 mentioned above, processing of this drawing 15 is periodically made once to being made once in three months in one month. Moreover, when judged with it being the standard root in the process 15 of this drawing 15 , process 6a of drawing 16 is performed. On the other hand, when judged with it being the root outside a standard, process 6b of drawing 17 is processed.

[0147] First, in process 6a of drawing 16 , cost information addition (actual result unit price) to the standard root is processed once periodically in one month. This compares a plan unit price with an actual result unit price to the actual result of having

passed the standard root. The factor of a physical distribution cost rise can be explored by this. In addition, it is made to acquire an actual result value from a host system 10 every month. Moreover, processing of such cost information addition (actual result unit price) is made to the data for every transportation path.
[0148] Then, process 6b of drawing 17 processes cost information addition (actual result unit price) to the root outside a standard periodically once in one month. It is for saying that this compares a plan unit price with an actual result unit price to the actual result of having passed the root outside a standard, and exploring the factor of physical distribution cost elevation. An actual result value is incorporated from a host system 10 like [b / this process 6] the above-mentioned process 6a every month. Moreover, the processing about the cost information addition (actual result unit price) performed is made for every transportation path.
[0149] Then, drawing 18 - drawing 23 explain the display screen in this operation gestalt.
[0150] First, drawing 18 is a flow chart which shows the flow of selection of each screen shown by drawing 19 - drawing 23 .
[0151] As shown in Step 180 of this drawing 18 , the initial screen of this operation gestalt is a reference condition input screen shown in drawing 19 . As continuously shown in Step 182 based on the data inputted on this reference condition input screen, the customer different-thing style cost reference key screen shown in drawing 20 is displayed. Moreover, based on the input made on this customer different-thing style cost reference key screen, the customer different-thing style cost reference **** detailed screen shown in drawing 21 of Step 184 or the root information screen classified by customer shown in drawing 22 of Step 186 is displayed. Moreover, according to the input in this root information screen classified by customer, the root information **** detailed screen classified by customer shown in drawing 23 of Step 188 is displayed.
[0152] The customer root information data shown in drawing 7 or drawing 8 can be created applying the 1st invention of the above in this operation gestalt, and information offer by the screen as shown in drawing 19 based on these customer root information data - drawing 23 can be performed as explained above. Moreover, since various data are constituted in this case, applying the 2nd invention of the above, it is possible storage capacity to be not only more reducible, but to process reference etc. more efficiently. Therefore, transportation of the transportation object whose order was received in the operating section according to this operation gestalt, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, the outstanding effect that the effort for managing physical distribution business and curtailment of costs can be aimed at can be acquired.
[0153] The information about the physical distribution of the primary transportation which was being distributed especially conventionally and secondary transportation can be referred to in the form connected as the consistent transportation root. For example, though a form changes before and after processing occurred, or there is a timing difference of transportation, change and the timing difference of these forms can be absorbed, a transportation path can be traced one by one, and the transportation root can be created. Moreover, the physical distribution cost of an in-the-hall product, a primary outside-the-hall transportation cost, and a secondary outside-the-hall transportation cost can grasp now more easily for every created transportation root.
[0154] Moreover, physical distribution cost can be referred to by the standard root and the root outside a standard about the transportation root, respectively. Moreover, physical distribution cost can be more finely grasped from a operating section. Furthermore, in a physical distribution section, since the plan physical distribution cost and actual result physical distribution cost for every transportation root can be referred to more easily, for example, and since the items of these physical distribution cost according to the transportation means exception, existence, a conveying distance of relay station, etc. can be referred to more easily, it becomes possible to advance the improvement activities of physical distribution cost better.
[0155]
[Effect of the Invention] Transportation of the transportation object whose order was received in the operating section according to the 1st invention of the above, and the 2nd invention of the above as explained above, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, the outstanding effect that the physical distribution cost management method which can aim at the effort for managing physical distribution business and curtailment of costs can be offered can be acquired.

[Translation done.]

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TECHNICAL FIELD

[The technical field to which invention belongs] While planning the facilities of analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order this invention required for the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer, and was especially received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management. While being able to carry out nearby arrangement, being able to cut down about information required for this reason and aiming at curtailment of physical distribution cost, it is related with the physical distribution cost management method which can aim at the effort for managing physical distribution business, and curtailment of costs.

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PRIOR ART

[Description of the Prior Art] Synthetic physical distribution cost including the costs which transportation to the last place of delivery of a consumer (or customer) of transportation physical distributions, such as a product whose order was received in the operating section, takes, the administrative expenses of the relay station which keeps a transportation object temporarily in the middle of a transportation path, etc. cannot be disregarded.
[0003] For example, the steel industry starts first in the physical distribution cost which transportation into the works of a raw material takes, and requires the physical distribution cost which raw material acceptance in works and transportation of the half-finished products in works take. For example, each stage of the molten iron in works, molten steel, ****, half-finished products, and a rolling object and the process carried in to a warehouse in the state of a product take many in-the-hall transportation. Moreover, the product carried in to the warehouse is conveyed to the last place of delivery of a consumer, after conveying to the relay station arranged at overseas or the domestic key point.
[0004] Thus, there is much physical distribution process from transportation into the works of a raw material to the last place of delivery of a consumer, and the steel industry takes many physical distribution cost. Especially the transportation object of the steel industry is a heavy lift, and is large also at this point. [of the burden of physical distribution cost] Moreover, the configuration of the product of the steel industry is [the shape of a tabular, a cylinder, and a coil etc.] also various. moreover, the size of a product -- size -- it is various Therefore, since the configuration and the size are colorful in this way, the demand to transportation is also various. In order to satisfy such a demand, while securing the staff who has a variety of handling devices for transportation, a transportation means, and special skill and requiring physical distribution cost, much time and effort is this thing.
[0005] Moreover, it takes out from the warehouse of works, and various transportation stages (it is also henceforth called a transportation path) exist in process in which a product is conveyed to the last place of delivery of a consumer through relay station, for example, ** and two or more transportation stages, such as each marine transportation stage, such as a transportation stage, cargo boats, ferries, etc. of each land, such as a freight car, and a truck, a trailer, exist.
[0006] Conventionally, in all the paths (the customer root is called henceforth) of transportation from a shipping agency to the last place of delivery of a consumer, it pays in each transportation stage (each transportation path), and the bill is dealt with.
[0007] For example, two or more transportation [process / in which a raw material is conveyed to works] stage exists. Moreover, the transportation stage of various gestalten exists also in works. Furthermore, it ships from works and many transportation stages exist also in the process conveyed to the last place of delivery of a consumer through relay station. A large number including relay-station administrative expenses etc. pay for every transportation stage of such a large number, and the handling of a bill and the handling of payment business are made.

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EFFECT OF THE INVENTION

[Effect of the Invention] While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management according to the 1st invention of the above, and the 2nd invention of the above as explained above. While being able to carry out nearby arrangement, being able to cut down or decrease about information required for this reason and aiming at curtailment of physical distribution cost, the outstanding effect that the physical distribution cost management method which can aim at the effort for managing physical distribution business and curtailment of costs can be offered can be acquired.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] Thus, in the former, since it pays for two or more transportation stage of every in the customer root, and a bill was treated, it paid and business was made, there was a problem that grasp of physical distribution cost was difficult.

[0009] Moreover, in between [after carrying in a raw material to works until it finally conveys to the last place of delivery of a consumer], since the information on various gestalten, such as information which business manages, information which works manage, and information which a head office physical distribution section manages, existed, it was difficult to share the information about physical distribution cost between business, works, and a head office physical distribution section. For example, in these business, works, and a head office physical distribution section, the handling of a code number which corresponds to the order form, operating form, and physical distribution form of the operation gestalt which the key information which discriminates a transportation object differs in many cases, for example, is mentioned later also differs in many cases mutually. Also at such a point, share-ization of the physical distribution cost information on each section, such as business, and works, a head office physical distribution section, is made difficult. For example, it may be unable to refer for the information on the physical distribution cost currently dealt with by the specific management key by the works and head office physical distribution section side by the management key by the side of business.

[0010] For this reason, grasp of synthetic physical distribution cost until it reaches the last place of delivery of a consumer will be difficult. Therefore, it will also be difficult to aim at curtailment of whole company-physical distribution cost by analyzing and managing such physical distribution cost. For example, it is difficult to offer the physical distribution which transportation was stabilized, and it was made, and the cheaper customer root of physical distribution cost was set up as the standard root, was more cheap, and was stabilized. Moreover, another new customer root will be compared to the already set-up standard root, and it will be difficult to consider change, improvement, etc. of such the standard root in respect of physical distribution cost etc.

[0011] Transportation of the transportation object whose order was made for this invention to solve the aforementioned conventional trouble, and was received in the operating section, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, it aims at offering the physical distribution cost management method which can aim at the effort for managing physical distribution business, and curtailment of costs.

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MEANS

[Means for Solving the Problem] First, the physical distribution cost management method of the 1st invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which it is shown whether it is the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel used for paying In case the customer root information data for grasping the aforementioned customer root are created First, find out the aforementioned last transportation path which delivery to a consumer completed, and the customer root which results in this last transportation path is made into the information trace customer root. The transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path whose key according to transportation well informed person corresponds, and correspond While connecting pursuing from the aforementioned last transportation path one by one to the upstream of a transportation path and creating the root trace information data of this information trace customer root based on the aforementioned source data Collecting the information about the physical distribution cost of this information trace customer root from the aforementioned source data The aforementioned technical problem is attained by creating a customer root physical distribution cost data, and creating customer root information data from these roots trace information data and a customer root physical distribution cost data.

[0013] Moreover, in the physical distribution cost management method of the 1st invention of the above, convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer. Two or more different customer roots are managed, and the delivery terms specified by a consumer can be satisfied. and the transporter system of each transportation path is stabilized, and it is established, and the sum total covering the whole customer root of physical distribution cost [fewer] In the case of offer of the aforementioned customer root information data which discriminate as the standard customer root and are made according to specification by the key according to transportation well informed person, the one customer root in two or more aforementioned customer roots The customer root which was specified by this key according to transportation well informed person and which is the aforementioned standard customer root of transportation from transportation object dispatch-origin to a consumer, While attaining the aforementioned technical problem by having offered two or more aforementioned customer root information on the customer root which is not the aforementioned standard customer root, facilities are given more to analysis, such as finding out the better customer root in respect of physical distribution cost etc., and management.

[0014] On the other hand, the physical distribution cost management method of the 2nd invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys the transportation object whose order was received in the operating section from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel

used for paying is shown The physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel from these source data, By while cutting down the aforementioned payment information data for the physical-distribution-management database which has the operating key which gave facilities to the information retrieval of a operating operating personnel, and a transportation path connection key, and having made it create, cutting down the information which shows the kind of transportation object The physical distribution cost management method which can attain the aforementioned technical problem and which nearby arrangement was carried out, and cut down or decreased about required information is offered.

[0015] The relay station which exists in the physical distribution cost management method of the 2nd invention of the above in the middle of the customer root which conveys a transportation object from a shipping agency to the last place of delivery of a consumer is taken into consideration. Moreover, the primary transportation from a shipping agency to relay station, While attaining the aforementioned technical problem by having attained communalization of the aforementioned physical distribution key, the aforementioned operating key, and the aforementioned transportation path connection key by the secondary transportation from relay station to the last place of delivery of a consumer, arrangement and curtailment, or reduction of required information is aimed at further.

[0016] Hereafter, an operation of the 1st invention of the above and an operation of the 2nd invention of the above are explained to this order.

[0017] First, in the 1st invention of the above, while enabling it to offer consistently the information about all the customer roots of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer, offer also of the information about the physical distribution cost of this customer root is enabled further simultaneously.

[0018] There are transportation path data which have from the former the key according to transportation well informed person and transportation path connection key which are dealt with for every transportation path, a physical distribution cost data, payment information data to a transportation operating personnel used for paying. This is because an transportation cost pays, and a bill is managed, or it pays for every transportation path and business is performed from the former. In the 1st invention of the above, to many data for such every transportation path, further, an applicable transportation path adds the last transportation path information data in which it is shown whether it is the last transportation path with which delivery to a consumer is completed, and is considering as source data. That is, the above-mentioned transportation path data, the physical distribution cost data, and the thing that pays and contains the last transportation path information data in addition to information data are called source data.

[0019] Here, the above-mentioned key according to transportation well informed person is for discriminating a transportation object. A physical distribution key and a operating key are contained in this key according to transportation well informed person, for example like the operation gestalt mentioned later.

[0020] For example, the physical distribution key mentioned later includes the information which discriminates works, the information called the physical distribution form which discriminates a transportation object, and the information which shows the last place of delivery of a transportation object, and the kind of transportation object is not only discriminable, but it can discriminate the transportation object of the same kind in a transport process mutually by the difference of the place of delivery etc.

[0021] Moreover, the information concerning a consumer so that it may mention later about a operating key, It has the information called the operating form which shows the kind of transportation object, and the information which shows the operating window which placed an order for the transportation object. The kind of target transportation object is not only discriminable, but the transportation object of the same form in a transport process is mutually distinguishable from the information about a consumer, the information about a operating window, etc. like the above-mentioned physical distribution key.

[0022] The above-mentioned transportation path connection key is information which shows the connection relation of each transportation path which constitutes the customer root. As mentioned above, the customer root is constituted by two or more transportation paths, for example, consists of transportation paths of various transportation stages, such as a transportation path of rail and road transportation by the truck, and a transportation path of the ocean transportation by the cargo boat. A transportation path connection key needs the information on the transportation path connection key which shows the connection relation of such each transportation path, and is shown with the operation gestalt mentioned later by each transportation path PA-PJ in the root trace information data of drawing 7 or drawing 8 etc.

[0023] The information on the transportation path connection key of transportation path PA-PJ of this operation gestalt

is constituted by the information about the partition of whether they are the information about leaving-the-garage facilities, the information about a loading port, the information about a discharging port, the information that shows the partition of whether to be being [it / primary transportation] the secondary transportation, and "****", or to be "manufacture." For example, a connection relation with other transportation paths which adjoin on the customer root can be grasped using the information about a loading port, or the information about a discharging port.
[0024] The above-mentioned physical distribution cost data is information which shows the physical distribution cost in each transportation path. You may include the costs paid to a carrier, the costs for maintaining the relay station which keeps a transportation object temporarily which may include the costs generated in the company, or are in the process from a shipping agency to the last place of delivery of a consumer in this physical distribution cost.
[0025] The above-mentioned pays and information data are the information for actually paying the generated physical distribution cost to a transportation operating personnel. It pays and this information that pays for information data, for example and shows a gestalt etc. to them is included.
[0026] Here, in case the customer root information data for grasping the customer root which conveys a transportation object from a shipping agency to a consumer in the 1st invention of the above, i.e., the information for showing so that the customer root can be grasped consistently as mentioned above, are created, the transportation path (the last transportation path) which delivery to a consumer completed is first found out using the aforementioned last transportation path information data. Here, the customer root which results in this last transportation path is defined as the information trace customer root. Next, the transportation path with which the two following conditions are satisfied is considered as the last transportation path, and it connects, pursuing from this transportation path one by one to the upstream of a transportation path. Moreover, a transportation path is connected, connecting one by one in this way, and the root trace information data of the customer root are created based on the above-mentioned source data.
[0027] (1) The 1st condition : the key according to this transportation well informed person agrees. For example, a physical distribution key and a operating key agree with the operation gestalt mentioned later.
[0028] (2) The 2nd condition : the discharging port of a front transportation path and the loading port of a post-transportation path agree.
[0029] Next, in the 1st invention of the above, a customer root physical distribution cost data is created, collecting the information about the physical distribution cost of the above information trace customer roots from the above source data.
[0030] Moreover, customer root information data are created from the above-mentioned root trace information data and this customer root physical distribution cost data. If such customer root information data are obtained, the customer roots to the last place of delivery of a consumer can be covered [no], grasp of the consistent customer roots, such as via what transportation path to go, can come out as much as possible, and the information on the physical distribution cost about this customer root can also be offered. Therefore, the grasp of synthetic physical distribution cost about such the whole customer root becomes easier.
[0031] For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0032] In addition, although the 1st invention of the above is not limited to this, you may make it introduce the view of the standard customer root. That is, two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer are managed. Moreover, the customer root which satisfies the following conditions among such two or more customer roots is discriminated as the standard customer root.
[0033] (1) The 1st condition : the delivery terms specified by a consumer are satisfying.
[0034] (2) The 2nd condition : the transporter system of the transportation path which constitutes the customer root concerned should be stabilized, and be established.
[0035] (3) The 3rd condition : the sum total covering the whole customer root concerned of physical distribution cost should be the fewer or fewer one compared with other customer roots.
[0036] The view of such the standard customer root is introduced. In the case of the above offers of customer root

information data namely, in the case of offer of the customer root information data made according to specification by the key according to transportation well informed person It is made to perform offer with two or more customer roots of transportation from dispatch-transportation object specified by this key according to transportation well informed person origin to a consumer, the customer root which is the especially above-mentioned standard customer root, and the customer root besides the standard which is not the above-mentioned customer root.
[0037] Thus, it can make it possible to grasp more easily the difference among two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer by introducing the view of the standard customer root. for example, -- usually -- the standard customer root -- using -- **** -- it is made like Moreover, if this customer root is compared with the above-mentioned standard customer root when the desirable customer root is able to be found out by a certain opportunity, evaluation by fields, such as evaluation of the found-out customer root concerned, for example, physical distribution cost etc., can be performed more easily. And when it becomes clear that this evaluated customer root is superior to the standard customer root in this time, the customer root concerned can also be used as the standard customer root from next time.
[0038] In addition, when the physical distribution cost of the actual result at the time of comparing the specific standard customer root with the other customer roots in this way varies, you may carry out actual result collection of the physical distribution cost of these standard customer root and the customer roots other than this in the periods during a predetermined period, for example, three months, etc. The more excellent customer root can be chosen as the standard customer root based on the actual result collection made in this way.
[0039] Next, an operation of the 2nd invention of the above is explained.
[0040] Although not limited to this, **** 2 invention needs to deal with much data, when [, such as a case of the 1st invention of the above,] showing the information covering all the customer roots to the last place of delivery of a consumer. Under the present circumstances, it not only constitutes such data in an optimum more, but it can aim at unnecessary or curtailment of the storage capacity of equipment which it not only can improve the efficiency of the processing which relates to for example, the 1st invention of the above by excluding data without use frequency, but performs such processing.
[0041] For this reason, **** 2 invention is considering the composition of the information and data which are used for a physical distribution cost management method. Moreover, in such a physical distribution cost management method, the point that arrange a transportation means or reference and grasp of physical distribution cost are made not only for the physical distribution section which performs various business about this but for a operating section [which placed an order for the transportation object], and works side is noted. Moreover, it considers also about the content of the source data which it generally has from the former.
[0042] First, as the 1st invention of the above generally also made reference as a certain source data from the former, there are transportation path data which have the key according to transportation well informed person and transportation path connection key for every transportation path, a physical distribution cost data, and payment information data to a transportation operating personnel used for paying. In addition to these data, by **** 2 invention, it is premised on the source data containing the last transportation path information data which were mentioned above.
[0043] In consideration of use frequency, reference efficiency, etc., the physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel, and the operating key which gave facilities to the information retrieval of a operating operating personnel are generated from such source data especially by **** 2 invention. Moreover, in addition to these physical distribution key and a operating key, the physical-distribution-management database which has a transportation path connection key is created. Moreover, in the case of creation of this physical-distribution-management database, while paying and cutting down information data, the information in the above source data which shows the kind of transportation object is decreased more.
[0044] Since the amount of data with which the physical-distribution-management database concerned is equipped is cut down by this, it not only can reduce storage capacity, but it can improve the processing speed in the case of the information retrieval by the physical distribution operating personnel, the operating operating personnel, and the person in charge of works.
[0045] In addition, with the information which shows the kind of the above-mentioned transportation object, an "order form", a "operating form", a "physical distribution form", etc. correspond in the operation gestalt mentioned later.
[0046] According to **** 2 invention, the information superior to the time's of realizing a physical distribution cost management method can be constituted as explained above. For this reason, unnecessary information can also be cut

down and the storage capacity of a means to memorize information can be stopped. Furthermore, the processing efficiency at the time of offering information can also be improved. For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0047] In addition, although **** 2 invention is not limited to this, it may take into consideration the relay station which exists in the middle of the customer root. This relay station is process in which a transportation object is conveyed to the last place of delivery of a consumer, and is a place which keeps a transportation object temporarily. Such relay station is prepared in an every place region with a consumer, or the key point on the way of transportation, is a thing and is arranged for the purpose of reservation of the time for delivery to a consumer etc. When preparing such relay station, generally, it may consider as the jurisdiction by the side of works before relay station, and may consider after relay station as jurisdiction of a operating section etc. Thus, if jurisdiction differs, the key information for generally searching the information about a transportation object may differ. However, in case relay station is taken into consideration in this way in **** 2 invention, you may make it attain communalization of the physical distribution key mentioned above, a operating key, and a transportation path connection key by the primary transportation from a shipping agency to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Thus, if communalization is attained, relay-station order cannot be asked but information retrieval of a physical distribution operating personnel can also be performed both more easily [the information retrieval of a operating operating personnel].
[0048] In addition, about **** 2 invention, the transportation path connection key, physical distribution key, and operating key which were mentioned above are not limited in detail. For example, the information which distinguishes the information which shows distinction of whether to be "****" and "manufacture" about the above-mentioned transportation path connection key, the information which shows the loading port of a transportation object, the information which shows a discharging port, the information which shows leaving-the-garage facilities, and primary transportation and secondary transportation may constitute. For example, the information which shows the works which ship the above-mentioned physical distribution key, the information on a physical distribution form which shows the form of a transportation object, and the information about a transportation means to use, for example, the information about truck line distance or transportation facilities, may constitute. Moreover, the information which shows the consumer which placed an order for the transportation object, the information which shows the operating window which dealt with this order, and the information on a operating form which shows the target kind of transportation object may also constitute the operating key mentioned above. Although both the above-mentioned physical distribution forms and operating forms show the kind of target transportation object here, you may set up suitable for information retrieval from a operating section suitable for information retrieval from a physical distribution section, respectively.
[0049]
[Embodiments of the Invention] Hereafter, the operation gestalt of the physical distribution cost managerial system with which the 1st invention of the above and the 2nd invention of the above were applied is explained in detail using drawing.
[0050] First, the premise of the physical distribution cost managerial system of this operation gestalt is explained.
[0051] Severity of in recent years physical distribution environment has been increasing more the correspondence to the problem and global environment problems of a labor shortage etc. Considering coping with it to these, it is expected that future physical distribution cost increases increasingly.
[0052] On the other hand, reduction of physical distribution cost is approached at the limitation by the conventional "rationalization inside the physical distribution section for the made product." Therefore, it is necessary to consider as the object of a cost cut of physical distribution cost [before product manufacture (for example, the raw material stage of a product)], and reduction of the physical distribution cost with which sale / production section was united is needed.
[0053] For reduction of such physical distribution cost, it becomes important to work on sale / production section and to cut down physical distribution cost. For this reason, the aim of the physical distribution cost managerial system of

this operation gestalt is as follows.
[0054] (1) A selling section enables it to perform the operating activities in consideration of physical distribution cost. For that, a operating section is easily obtained in the information about the physical distribution cost according to customer root.
[0055] (2) In case a physical distribution section decides upon profit planning, enable it to grasp physical distribution cost information more easily at various cut ends (a form, transportation facilities or a transportation area, etc.).
[0056] Here, an object [gestalt / operation / this] is a physical distribution in the steel industry, and it can be classified as follows.
[0057] (1) The classification according to the kind of transportation object : a raw material physical distribution, a molten-iron physical distribution, a steel-manufacture physical distribution, a half-finished-products physical distribution, a product physical distribution, a recovery physical distribution.
[0058] (2) The classification of the physical distribution the physical distribution in an iron mill, or outside an iron mill : the physical distribution in works, the physical distribution outside works.
[0059] (3) The classification by the classification on accounting : **** expense, a manufacturing cost.
[0060] In the above classifications, classification with **** expense and a manufacturing cost is enabled for the product physical distribution with this operation gestalt for the physical distribution in an iron mill, and the physical distribution outside an iron mill. Here, in the classification by the kind of transportation object, other portions except a product physical distribution are managed at each works, respectively, and the analysis of physical distribution cost in the hall is possible for them. Therefore, if the physical distribution cost about a product physical distribution is grasped in this way, it comes to be able to perform management of whole company physical distribution cost [-like in common].
[0061] Here, when a product physical distribution is considered, it can classify into an in-the-hall physical distribution, the primary transportation from works to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Here, about the portion of an in-the-hall physical distribution, the data of an in-the-hall physical distribution system (sign 13 of drawing 1) are made into source data. On the other hand, about the outside-the-hall physical distribution, about primary transportation, the data of a primary transportation cost payment system (sign 15 of drawing 1) are made into source data, and the data of a secondary transportation cost payment system (sign 16 of drawing 1) are made into source data about secondary transportation.
[0062] As transportation facilities set as the object of primary transportation, a coaster, a truck, a small vessel, **, a freight car, etc. are colorful, and fee calculation also changes with each transportation facilities. On the other hand, as secondary transportation, fee calculation is performed for every work of the cargo work after relay-station warehousing, storage, and delivery. Therefore, data not only are distributing in two or more databases, but the handling units of each data differ in the primary transportation cost payment system or the secondary transportation cost payment system. That is, primary transportation is an invoice unit for every transportation path of each transportation stage. About secondary transportation, it is the leaving-the-garage vote unit of the last delivery to the last place of delivery of a consumer. Therefore, compared with primary transportation, the data of the secondary transportation which covers the last delivery of a handling unit are more finer. In addition, about the in-the-hall physical distribution, the data about a physical distribution are dealt with per form, and incorporate and use this also with this operation gestalt.
[0063] The fundamental view of construction here of the physical distribution cost management method of this operation gestalt is the following four points.
[0064] (1) :in the hall [which is consistent and grasps the product transportation including primary transportation and secondary transportation about in the hall, outside the room, and outside the room] -- setting -- primary transportation outside the hall -- setting -- moreover, secondary transportation outside the hall -- setting -- etc. -- the whereabouts is distributing the actual result data about a physical distribution, and the timing of transportation also differs In addition, when processing is added at a transportation place, a configuration and a form also change. For this reason, it was difficult to be conventionally consistent and to grasp from factory shipments to the last place of delivery of a consumer.

[0065] (2) Grasp of the physical distribution cost information according to consumer (an actual result and standard) : the conventional physical distribution cost information is grasped for every management key of a physical distribution section. For this reason, in order for a operating section to grasp physical distribution cost for example, according to a

customer, the information on a physical distribution section had to be processed anew. With this operation gestalt, the management key (it is a management key about a marketing department, a group, a customer, etc., and considers as a operating key) which gave facilities to the information retrieval of the operating personnel of a operating section with the management key (physical distribution key) which gave facilities to the information retrieval of the operating personnel of a physical distribution section is given to the information about the physical distribution cost to treat. For this reason, the physical distribution cost information with which this operation gestalt is equipped can be offered also to a operating section with the gestalt for which were more [more easily and] suitable also as opposed to a physical distribution section.

[0066] (3) Diversification of information offer of the actual result about a physical distribution : when advancing physical distribution increase in efficiency and going, physical distribution cost etc. grasps more easily the actual result of the physical distribution in the present condition from various directions. With this operation gestalt, since various information offer screens (drawing 19 mentioned later - drawing 23) are improved, it excels in this point.

[0067] Hereafter, the composition of the physical distribution cost managerial system of this operation gestalt is explained.

[0068] Drawing 1 is the block diagram showing the composition of the physical distribution cost managerial system of this operation gestalt, and the host system which offers source data to this.

[0069] The composition of the physical distribution cost managerial system 40 of an operation gestalt with which the 1st invention of the above and the 2nd invention of the above were applied is shown by this drawing 1 . Furthermore, the composition of the host system 10 which offers the source data which this physical distribution cost managerial system 40 needs is shown.

[0070] First, the physical distribution cost managerial system 40 consists of a server computing system 42 and many terminal computing systems 51-56. These servers computing system 42 and the terminal computing systems 51-56 are constituted by each on EWS (engineering workstation), and are mutually connected by LAN (local area network)43.

[0071] This LAN43 is Ethernet specifically used abundantly by EWS. the terminal computing systems 51-56 connected by this LAN43 are illustrated depending on the case -- it has six or more sets and is arranged in the head office physical distribution planning department (physical distribution section), head office business (operating section), each branch (it is mainly a operating section and there is also an element of a physical distribution section), the Chiba iron mill, the Mizushima iron mill, and the Chita factory (above, works) Here, two or more terminal computing systems may be arranged in each arrangement place. For example, the head office physical distribution planning department may be equipped with two or more terminal computing systems. Moreover, the terminal computing system 53 is arranged at each of each branch.

[0072] Next, as shown in this drawing 1 , it is constituted by the server computing system 42 with the main part 60 of a computer, and the cost-data base 63 classified by customer root and the profit-planning database 64.

[0073] The main part 60 of a computer updates the data of the profit-planning database 64 while updating the data of the cost-data base 63 classified by customer root based on the source data of the order entry system 12 with which a host system 10 is equipped, the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15, and the secondary transportation cost payment system 16. Download of the source data shown by S1 is specifically performed periodically in (1 time / three months), and download of the source data shown by signs S2 and S3 and S4 is performed periodically [(time / 1 //) month]. Thus, based on the downloaded source data, the main part 60 of a computer performs renewal of the cost-data base 63 classified by customer root, and the profit-planning database 64.

[0074] An operation of the host system 10 of such composition and the physical distribution cost managerial system 40 is explained briefly.

[0075] First, the source data in a host system 10 are periodically downloaded on the main part 60 of a computer of the physical distribution cost managerial system 40. Based on the source data downloaded in this way, the main part 60 of a computer performs the creation and updating of the cost-data base 63 classified by customer root, and the profit-planning database 64 so that it may mention later in detail. Thus, construction of the cost-data base 63 classified by customer root and the profit-planning database 64 constitutes the information offer system (physical distribution cost managerial system) by which the 1st invention of the above and the 2nd invention of the above were applied in the server computing system 42.

[0076] Then, the head office physical distribution planning department of a physical distribution section can acquire the

information about the physical distribution cost of a request required as a physical distribution operating personnel from the server computing system 42 using the terminal computing system 51. In the branch which is similarly a operating section, this Shamoto business of a operating section can acquire the information about physical distribution cost characteristic as a operating operating personnel from the server computing system 42 using the terminal computing system 53 using the terminal computing system 52. Moreover, the Chiba iron mill, the Mizushima iron mill, and the Chita factory which become a works side can acquire the information about physical distribution cost peculiar to a works side from the server computing system 42 using the terminal computing systems 54-56, respectively.

[0077] Then, it explains in more detail about the source data which the physical distribution cost managerial system 40 with which the above-mentioned host system 10 is equipped uses.

[0078] First, the source data with which a host system 10 is equipped especially which the physical distribution cost managerial system 40 needs have in principle composition shown in the following table. That is, source data are constituted by the key item KA and the data-division part DA. Moreover, the key item KA is paid with the physical distribution key KA1 as shown in the following table, the operating key KA2, and the connection key KA3, and is constituted by the key KA4. Moreover, about the data-division part DA, it is constituted with the data DA 1 equipped with weight information and cost information.

[0079]

[Table 1]

原始データ

KA：キー項目	KA1：物流キー（工場、物流品種、最終受渡場所）
	KA2：営業キー（需要家、営業窓口、営業品種）
	KA3：接続キー（出庫便、積地、揚地、1次2次輸送区分、販直／製造区分）
	KA4：支払キー 1次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件） 2次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件、入庫便、船名、置場）
DA：データ部分	DA1：重量情報、費用情報

[0080] In the source data mentioned above, especially the source data that are in the primary transportation cost payment system 15, and are used with the physical distribution cost managerial system 40 are constituted by the amount of [the key item KB and / DB] data division, as shown in the following table. Furthermore, the key item KB is paid with the physical distribution key KB1 as shown in the following table, the operating key KB2, and the connection key KB3, and is constituted by the key KB4. Moreover, the amount of [DB] data division have the data DB1 about delivery facilities. Here, about such source data of the primary transportation cost payment system 15, the loading port of the connection key KB3 turns into a place of shipment, and a discharging port serves as the place of delivery.

[0081]

[Table 2]

1次輸送費支払システム

KB：キー項目	KB1：物流キー	工場、物流品種、最終受渡場所
	KB2：営業キー	需要家、営業窓口、営業品種
	KB3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便
	KB4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件
DB：データ部分	DB1：配達便｛配達重量、配達費用（基本費用、その他費用）｝	

[0082] Next, the source data with which the secondary transportation cost payment system 16 is equipped and which the physical distribution cost managerial system 40 uses are constituted by the key item KC and the data-division part DC as shown in the following table. Moreover, the key item KC is paid with the physical distribution key KC1 as shown in the following table, the operating key KC2, and the connection key KC3, and is constituted by the key KC4. Moreover, about the data-division part DC, it has the data DC 1 in which the fixed cost about cargo work as shown in the following table, storage, delivery, maintenance of relay station, etc. is shown. In addition, by the connection key KC3 in the source data of the secondary transportation cost payment system 16, a loading port shows relay station, and a discharging port shows the place of delivery by it.

[0083]
[Table 3]
2次輸送費支払システム

KC：キー項目	KC1：物流キー	工場、物流品種、最終受渡場所
	KC2：営業キー	需要家、営業窓口、営業品種
	KC3：接続キー	販直／製造区分、積地（＝中継基地）、揚地（＝受渡場所）、出庫便
	KC4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件、船名、置場、入庫便
DC：データ部分	DC1：……	{荷役重量、荷役費用（基本費用、その他費用）}
	……	{保管重量、保管費用（基本費用、その他費用）}
	……	{配達重量、配達費用（基本費用、その他費用）}
	……	{固定費用}

[0084] Next, the data memorized by each database of the physical distribution cost managerial system 40 of this operation gestalt created based on the source data stated above are explained.
[0085] First, as shown in the following table, the data memorized at the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt have the following composition. That is, the data memorized at the cost-data base 63 classified by customer root are first constituted by the key item KD and the data-division part DD. Moreover, it is constituted by the physical distribution key KD1 as shown in the following table, the operating key KD2, and the connection key KD3 about the key item KD. About the data-division part DD, it is constituted with the data DD 1 about primary transportation, and the data DD 2 about secondary transportation.
[0086]
[Table 4]
物流コスト管理システム（顧客ルート別コストデータベース）

KD：キー項目	KD1：物流キー	工場、物流品種（小分類・大分類）、最終受渡場所
	KD2：営業キー	需要家、営業窓口、営業品種
	KD3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便、1次2次輸送区分
DD：データ部分	DD1：＜1次輸送＞	配達便、配達重量、配達費用（基本費用、その他費用）
	DD2：＜2次輸送＞	荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用

[0087] Next, the data memorized by the profit-planning database 64 in the physical distribution cost managerial system 40 serve as composition as shown in the following table. That is, it is constituted by the amount of [the key item KE and / DE] data division. Moreover, the key item KE is constituted by the physical distribution key KE1 as shown in the following table, the operating key KE2, and the connection key KE3. Moreover, about a part for data division DE, it is constituted with the data DE1 about primary transportation, and the data DE2 about secondary transportation.
[0088]
[Table 5]
物流コスト管理システム（利益計画データベース）

KE：キー項目	KE1：物流キー	工場、物流品種（小分類・大分類）、最終受渡場所
	KE2：営業キー	需要家、営業窓口、営業品種
	KE3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便、1次2次輸送区分
DE：データ部分	DE1：＜1次輸送＞	配達便、配達重量、配達費用（基本費用、その他費用）
	DE2：＜2次輸送＞	荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用

[0089] Unlike the fundamental source data mentioned above, the source data in the primary transportation cost payment system 15, and the source data in the secondary transportation cost payment system 16, the data KA4, KB4, and KC4 related for paying, for example, payment keys, are excluded by the data in the cost-data base 63 classified by customer root, and the data in the profit-planning database 64 as explained above. At source data, although such data related for paying have a huge amount, since such information related for paying is excluded, in the cost-data base 63 classified by these customer root, or the profit-planning database 64, the processing time which aims at curtailment of storage capacity and reference takes can be shortened.
[0090] Moreover, compared with the physical distribution form and operating form in source data, the classification of the physical distribution form of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt or the profit-planning database 64 or a operating form is made rougher so that it may mention later in detail. For this reason, it not only can decrease the amount of the data in which the physical distribution form and operating form in this operation gestalt are shown, but it can perform reference better.
[0091] Moreover, as compared with mutual, the table showing the data memorized at the cost-data base 63 classified by customer root mentioned above and the table showing the data memorized by the profit-planning database 64 are made the same [the key about primary transportation and the key about secondary transportation] so that clearly. Therefore, it is also possible to search the data about primary transportation and the data about secondary transportation at once, using a common key.
[0092] Next, the generation and updating of the data of the cost-data base 63 classified by customer root or the data of the profit-planning database 64 in this operation gestalt are explained from the source data in a host system 10.
[0093] First, drawing 2 is the diagram showing the data generation and updating of the database of this operation gestalt based on source data.
[0094] In this drawing 2 , a host system 10 memorizes and the fundamental source data 18 used with the physical distribution cost managerial system 40 of this operation gestalt are shown. Moreover, the data memorized at the cost-data base 63 classified by customer root of this operation gestalt and the data memorized by the profit-planning database 64 are shown.
[0095] First, the physical distribution key KD1 memorized at the cost-data base 63 classified by customer root, the operating key KD2, the connection key KD3, the physical distribution key KE1 memorized by the profit-planning database 64, the operating key KE2, and the connection key KE3 are generated or updated based on the physical distribution key Kn1, the operating key Kn2, and the connection key Kn3 of source data 18, respectively. Here, n is B or C.
[0096] Next, a part for the data division DE 1 about the weight information and cost information of the profit-planning database 64 is generated or updated based on a part for the data division Dn 1 about the weight information and cost information of source data 18. On the other hand, the data about the weight information and cost information of the cost-data base 63 classified by customer root are generated based on a part for the data division DE 1 of the profit-planning database 64.
[0097] In addition, the data of the primary transportation cost payment system 15 of a host system 10 used for the generation or updating of the cost-data base 63 classified by customer root in the physical distribution cost managerial system 40 of this operation gestalt and the data of the secondary transportation cost payment system 16 are as follows.
[0098] (1) Customer root information (cost-data base classified by customer root)
The information 1A1. key item 1A1a. physical distribution key from 1 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
1A1b. operating key (a consumer, a operating window, operating form)
1A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1A2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
The information 1B1. key item 1B1a. physical distribution key from 1 transportation-cost [B.secondary] payment system (works, a physical distribution form, the last place of delivery)

1B1b. operating key (a consumer, a operating window, operating form)
1B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1 B-2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
[0099] Moreover, the data of the primary transportation cost payment system 15 of a host system 10 used for the physical distribution cost managerial system's 40 updating or generation of this operation gestalt of the data of the profit-planning database 64 and the data of the secondary transportation cost payment system 16 are as follows.
[0100] (2) Profit-planning information (profit-planning database)
The information 2A1. key item 2A1a. physical distribution key from 2 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
2A1b. operating key (a consumer, a operating window, operating form)
2A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
It is 2A2a. delivery facilities {delivery weight and delivery-charge (basic costs, other costs)} by 2A2. data division.
The information 2B1. key item 2B1a. physical distribution key from 2B. transportation cost [secondary] payment system (works, a physical distribution form, the last place of delivery)
2B1b. operating key (a consumer, a operating window, operating form)
2B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A 2B2. data-division part 2B2a. load weight, cargo work costs (basic costs, other costs)
A 2B2b. storage weight, an inventory carrying cost (basic costs, other costs)
A 2B2c. delivery weight, a delivery charge (basic costs, other costs)
2B2d. fixed costs (maintenance expense of relay station)
[0101] Next, how to generate the data (code) of a operating form and a physical distribution form from the data of an order form in the case of generation of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt and the data of the profit-planning database 64 or updating (code) is explained from source data.
[0102] First, if an order is received from a consumer in the operating section 67 as shown in drawing 3 , order form 67a will be published. This order form 67a is reached at no less than 1000 forms. Then, in the operating section 67, operating form 67b for using the physical distribution cost managerial system 40 of this operation gestalt is generated from order form 67a. This operating form 67b is about 75 forms. Therefore, the ratio (N2:1) of the number of the forms of order form 67a and operating form 67b is about 13.3 (N2 is about 13.3), and can decrease the number of forms or more by 1/13.
[0103] Then, in the physical distribution section 68, physical distribution form 68a for using the physical distribution cost managerial system 40 of this operation gestalt is generated based on order form 67a. This physical distribution form 68a is about 68 forms. Therefore, the ratio (N1:1) of the number of forms of order form 67a and physical distribution form 68a is about 14.7 (N1 is about 14.7), and can cut down the number of forms 1/14 or more.
[0104] In addition, the conversion method of operating form 67b from order form 67a and the conversion method of physical distribution form 68a from order form 67a are as in the following table.
[0105]
[Table 6]

品種コードの変換方法

名称	使用部署	品種の数	変換方法	目的／内容
M1．オーダ品種	営業部門	1000		契約をする際に発番される契約番号の２～４桁で決まる
M2．営業品種	営業部門	７５	オーダ品種と工場コードと国内・輸出区分コードで変換	営業の販売計画の管理レベルに合わせた品種
M3．物流品種	物流部門	６８	オーダ品種と工場コードで変換	物流コストを意識した管理レベルに合わせた品種

[0106] In addition, the order form as shown in drawing 4 has the following composition.
[0107] (1) The code which shows the contract ground domestic outside the country using the contract ground code alphanumeric character of one character.
[0108] (2) The component kind code of a form code (3 figures) = it is as being shown in the 1 of the table of the "order form code" which roll partition (1 figure) + forms (2 figures) are consisted of, and is shown below, and its 2. In addition, the code currently displayed just before each form name of 1 of ******** and its front Naka of 1 expresses the following.
"K" -- "domestic S" -- in-house "Y -- Order entry mechanization non-object [0109]" -- Domestic, in the company, export community "*" -- Export "a blank" (3) consecutive numbers -- under the treaty of [G] a., in case it contracts, it is numbered
b. It is considered and numbered so that it may avoid that a number overlaps within a short period of time.
c. A "serial number" may be beforehand divided for the reason of an area, department and section, and others.
d. Grouping of the head number of two or more kinds is carried out, and it is not restricted except for a special case about attaching consecutive numbers.
[0110]
[Table 7]

オーダ品種コード（その1）

ロール区分 / 品種		圧延製品											
		0		1		2		3		4			
				ニューロール		ニューロール		山売・格外・3級		ニューロール			
厚板	30				極厚鋼板	K S	極厚鋼板 シャー向け耳付	K S					
	31				造船材	K S	造船材 シャー向け耳付	K S	造船乱尺及び切断フラットバー乱尺	K S	切断フラットバー（大板切断品）		
	32				ボイラー材	K S		K S	ボイラー乱尺				
	33				厚板一般材	K S	厚板一般材 シャー向け耳付	K S	厚板一般材乱尺 山売り・3級	K S	厚板一般材 カット・バー		
	34				中板一般材	K S	中板一般材 シャー向け耳付	K S	中板一般材乱尺 山売り・3級	K S	中板カット・バー		
	35				縞鋼板		縞鋼板コイル	K S	縞鋼板・乱尺 山売り・3級				
	36				特殊極厚鋼板	K S	特殊極厚鋼板 シャー向け耳付	K S	特殊極厚鋼板 在庫品				
	37				調質厚鋼板	K S	調質厚鋼板 シャー向け耳付	K S	調質厚鋼板 在庫品	K S	調質鋼カット・バー		
	38				厚板クラッド	K S		K S	厚板クラッド 在庫品				
	39				特殊鋼厚板	K S	特殊鋼厚板 シャー向け耳付	K S	特殊鋼厚板 在庫品	K S	特殊鋼カット・バー		

[0111]
[Table 8]

オーダ品種コード（その２）

品種＼ロール区分		圧延製品 5		加工品 6		工事込契約 7		8		その他 9	
		発生品端板短尺									
厚板	30										
	31										鋳鋼
	32										Vプロ
	33		厚板一般材端板		厚板ブランク材						特殊鋼鋳物
	34	K	中板一般材端板 S		中板ブランク材						銅合金鋳物
	35	K S	縞鋼板端板								
	36				鋼板						鋳鋼ロール
	37										
	38			*	鋼板製高架水槽						
	39			*	その他加工品						鋳鍛鋼組立品

[0112] Operating form 67b changed from order form 67a is in addition, as it is shown in the following table (the 1 of the table of a "operating form code", and its 2). In addition, this order form 67a is another system in domestic, in the company, and export.

[0113]

[Table 9]

営業品種コード（その１）

NO	品種・I 〔国内〕	コード
1	厚中板 （造船材）	01
2	厚中板 （一般材）	03
3	縞板	06
4	特殊鋼広巾厚板	11
5	特殊鋼中薄板	12
6	特殊鋼帯鋼 （千葉・水島）	14
7	特殊鋼帯鋼 （阪神）	15
8	特殊鋼平鋼	16
9	特殊鋼極厚鋼板	17
10	特殊鋼スラブ （GC）	18

[0114]

[Table 10]

営業品種コード（その２）

NO	品種・I 〔国内〕	コード
11	厚板クラッド	1A
12	ステンレス HOT KE	20
13	ステンレス HOT KK	21
14	ステンレスコールドKE（ZR品）	27
15	ステンレスコールド KK （ZR品）	28
16	ステンレスクラッド	29
17	ステンレスパイプ	2A
18	ステンレスコールド KE （TANDEM品）	2C
19	ステンレスコールド KK （TANDEM品）	2D

[0115] As [show / physical distribution form 68a changed from order form 67a / in addition, / in the following table] (the 1 of the table of a "physical distribution form code", and its 2)

[0116]

[Table 11]

物流品種コード（その1）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
1	厚板	A	1	厚板	A1△△
			2	厚板端板	A2△△
2	熱延	B	3	熱延特殊コイル	B1BB
			4	熱延　コイル	B1△△
			5	熱延特殊薄板	B2BS
			6	熱延特殊厚板	B2BN
			7	熱延　薄板	B2△△
3	冷延	C	8	冷延特殊コイル	C1CB
			9	冷延　コイル	C1△△
			10	冷延特殊薄板	C2CH
			11	冷延　薄板	C2△△
			12	コールド特品	C3△△
4	表面処理	D	13	ブリキ	D1△△
			14	ティンフリー	D2△△
			15	カラートタン	D3△△
			16	亜鉛メッキ	D4△△
			17	溶融亜鉛メッキ	D5△△
			18	電気亜鉛メッキ	D6△△
			19	ジンクロメタル等	D△△△
5	珪素	E	20	珪素	E△△△
6	ステンレス	F	21	ステンレス	F△△△
			22	ステンレス特品	F5△△
7	形鋼	G	23	大形形鋼	GA△△
			24	中形形鋼	GB△△
			25	大形鋼矢板	GC△△
			26	支保工	GE△△
			27	CT形鋼	GH△△
			28	組み合わせ鋼矢板	GT△△
			29	軽量ロールH	GW△△
			30	大形ハイスレンドH	G4△△
			31	中形ハイスレンドH	G6△△
			32	フォークリフトマスト	G5△△
			33	大和H	GZ△△
		（J1）	34	大形フラットバー	J1△△
			35	その他形鋼	G△△△
8	線材	H	36	線材	H△△△
			37	バーインコイル	H2△△
9	棒鋼	J（J1を除く）	38	棒鋼	J△△△

[0117]
[Table 12]

物流品種コード（その2）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
10	シームレス鋼管	K1	39	小径シームレス	KQ△△
			40	小径シームレス塗覆管	KR△△
			41	中径シームレス	KJ△△
			42	中径シームレス塗覆管	KK△△
11	溶鍛接管	K2	43	小径管	KN△△
			44	小径管塗覆管	KP△△
			45	中径管	KG△△
			46	中径管塗覆管	KH△△
			47	鍛接管	KL△△
			48	鍛接塗覆管	KM△△
			49	コラム	KS△△
12	大径管	K3	50	スパイラル	KE△△
			51	スパイラル塗覆管	KF△△
			52	板巻鋼管	KC△△
			53	板巻鋼管塗覆管	KD△△
			54	UOE	KA△△
			55	UOE塗覆管	KB△△
13	鋳鍛鋼	L	56	鋳鍛鋼	L△△△
14	溶接棒	M	57	溶接棒	M△△△
15	鉄粉	N	58	鉄粉	N△△△
16	コルゲート	P	59	コルゲート	P△△△
17	鋼材半製品	R	60	ビレット	R1△△
			61	スラブ	R2△△
			62	鋳物銑	R5△△
			63	その他鋼材半製品（ブルーム・鋼塊・製鋼溶銑）	R△△△
18	その他鋼材	S	64	ソケット	SA△△
			65	照明柱	SB△△
			66	電柱	SC△△
			67	照明鉄塔	SS△△

[0118] In this operation gestalt, the number of forms of operating form 67b changed from order form 67a is cut down by about 1/13 compared with order form 67a as explained above. Moreover, compared with order form 67a, it has dropped to about 1/15 also about the number of forms of physical distribution form 68a changed from order form 67a. Therefore, shortening of the processing time which it not only can reduce storage capacity more, but reference takes it can also be aimed at by cutting down the number of forms in this way.

[0119] Next, generation of the customer root information data made with the physical distribution cost managerial system 40 of this operation form or processing of updating is explained, using a flow chart.

[0120] Drawing 5 is a flow chart which shows creation of the customer root information data made in the physical distribution cost managerial system of this operation form, or processing of updating.

[0121] In this drawing 5 , actual result collection processing is first made at Step 110. This actual result collection processing is performed periodically on a monthly predetermined day. In this actual result collection processing, distribution and incorporation of the download to the physical distribution cost managerial system 40 from the host system 10 as shown in drawing 6 described below, and the data to each database shown in drawing 6 are made.

[0122] Drawing 6 is a block diagram for download of the source data from a host system to each database in the physical distribution cost managerial system of this operation gestalt being shown.

[0123] In this drawing 6 , the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15 and the secondary transportation cost payment system 16 are formed in the host system 10 as mentioned above using drawing 1 . Moreover, in addition to this, the facilities database 26 and the secondary database 28 are formed in the main part 60 of a computer of the server computing system 42 in the physical distribution cost managerial system 40 of this operation gestalt the 25 or primary 24 or primary 21 or primary in-the-hall database ship database truck database.

[0124] Moreover, the source data of the in-the-hall physical distribution system 13 are downloaded to the in-the-hall database 21, and are incorporated. The source data of the primary transportation cost payment system 15 are downloaded to the main part 60 of a computer in the server computing system 42, reach 24 or primary primary ship

database truck database 25, in addition to this, can be distributed to either of the facilities databases 26 the 1st order, and are incorporated. The source data of the secondary transportation cost payment system 16 are downloaded to the secondary database 28, and are incorporated.

[0125] Moreover, at this step 110, based on the incorporated source data, it downloads in this way, and the transportation physical distribution discernment key information data shown in the key information on the cost-data base 63 classified by customer root and the profit-planning database 64, i.e., drawing 7 mentioned later and drawing 8 , are generated, and it is shown in these drawing 7 and drawing 8 , especially carries out to some customer root information data.

[0126] Then, at Step 114, it judges whether it is the processing performed once in three months. If this judgment is "Y", it will mean that it was judged with performing processing which should be performed once in three months, and will progress to Step 142 continuously. When judged with "N" at this step 114, it means that it was judged with performing processing performed once in one month, and progresses to Step 118 continuously.

[0127] Then, the master file of the standard customer root is searched with Step 142, and it judges by the item of "the standard / root partition data outside a standard" of the high-order end of drawing 7 or drawing 8 in whether the customer root which conveyed is the standard customer root. The profit-planning database 64 is created at continuing Step 146.

[0128] On the other hand, when judged with "N" at the above-mentioned step 114, root actual result information creation is performed at Step 118. This, using the 24 or primary primary ship database truck database 25 shown in drawing 6 , and the data memorized by the primary facilities database 26 and secondary database 28 in addition to this The data of a transportation path are connected from the data of the last transportation path which delivery to a consumer completed, pursuing one by one to the upstream (works side) of a transportation path, and processing in which even the data of the transportation path which finally leaves works connect is performed. To the flow and reverse of such processing connected while carrying out a sequential trace, i.e., a transportation physical distribution, the data of a transportation path are connected one by one at reverse, and it dies. Such connection conditions are connected pursuing one by one for the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path key information, i.e., a physical distribution key, and whose operating key correspond, and correspond. By such processing, the root trace information data shown in drawing 7 or drawing 8 are obtained.

[0129] At Step 128, it judges whether it is the object of actual result collection of the standard customer root or the customer root outside a standard following this step 118. When judged with there being the root same in the past and it being the object of such actual result collection, it progresses to Step 130 continuously. On the other hand, when judged with it not being the object of actual result collection, it progresses to Step 124, considers as the object of next data accumulate lump, and considers as the object of next actual result collection.

[0130] Here, at Step 152, plan unit price addition is processed after the above-mentioned step 146. Or when it is judged with it being a candidate for actual result collection at the above-mentioned step 128 and progresses to Step 130, processing of actual result unit price addition and the amount addition of actual results is performed.

[0131] Here at these steps 152 and 130 While using key information, i.e., a physical distribution key, and a operating key as a search key, a root configuration item (the partition of facilities, a loading port, a discharging port, primary transportation, or secondary transportation, ****, or partition of manufacture) is used as a search key. It reaches 24 or primary 21 or primary in-the-hall database ship database truck database shown in drawing 6 25, in addition to this, the primary facilities database 26 and secondary database 28 are searched, and the unit price of each transportation path and the data of a weight are acquired. The edit place of the acquired information (a unit price, weight) is judged from the partition of the partition of facilities, primary transportation, or secondary transportation, ****, or manufacture.

[0132] Here, from the root of one set of a loading port and a discharging port, i.e., one transportation path, a plan unit price calculates the average of an actual result unit price in three months, and is called for. This is called for by carrying out the division of the sum total of the costs collected in three months in the amount similarly collected in three months.

[0133] moreover -- although it is good also as a plan unit price as it is in the actual result unit price for three months called for by doing in this way -- the actual result unit price for such three months -- receiving -- a rate -- the multiplication of the ratio which considered the contents of a cost cut, such as - increase in efficiency, is carried out, and it is good also considering this as a plan unit price a discount the ratio of such a content of a cost cut predicts change of the future actual result unit price for three months, and according to continuation order -- or the price

increase element by a certain factor is taken into consideration
[0134] Next, an actual result unit price is called for as an actual result unit price for one month based on actual result collection of the costs for one month made about the root of one set of a loading port and a discharging port, i.e., one transportation path, and actual result collection of the amount for one month. It becomes the actual result unit price required in specifically carrying out the division of the total of costs by which actual result collection was carried out in one month by total of the amount collected in one month calculated as average costs for one month.
[0135] After these steps 152 or processing of 130 is completed, to the customer root information data shown in drawing 7 , plan unit price information data or actual result unit price weight information data can be given, and customer root information data as shown in drawing 8 as a result can be obtained.
[0136] In addition, the processing made at Step 142 of above-mentioned drawing 5 is made as [show / in drawing 9 - drawing 13]. Moreover, the processing made at Step 118 which drawing 5 mentioned above is made as [show / by drawing 14 - drawing 17].
[0137] First, drawing 9 shows the source data made into the object of processing of Step 142, and each transportation path is isolated. First, the 1st transportation path is a transportation path from N1 (works) to N2a (relay station). The 2nd transportation path is a transportation path from N2b (relay station) to N3a (subcontract place). The 3rd continuing transportation path is a transportation path from N3b (subcontract place) to N4 (consumer). Here, each of N2a and N2b shows the same relay station. Moreover, each of N3a and N3b shows the same subcontract place.
[0138] Then, processing of the root connection of a process 1 made at the above-mentioned step 142 is shown by drawing 10 . This processing is performed once in three months. Moreover, processing of this root connection is processing in which connect the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path a physical distribution key and a operating key agree with the 3rd transportation path as the starting point with which the data that it was the last transportation path were given, and correspond one by one, and it finally arrives to shipment works. By such processing, from the 3rd transportation path, all transportation paths are connected, and the customer root which becomes with these transportation path can grasp even the 1st transportation path now consistently.
[0139] Drawing 11 is the process 2 made at Step 142, and judges the customer root besides a standard or a standard. This judgment is performed once periodically in three months. Moreover, this judgment judges. Moreover, such a judgment is made by the comparison with the customer root used as the object used as the actual result, and the root A (standard root) shown in drawing 11 , and comparison with Root B (root outside a standard). Moreover, the transportation gestalt of the standard root and the root outside a standard and comparison of a unit price are performed after such a comparison test. Grasp of the unusual root is made by this.
[0140] In addition, this process 2 judges whether it is the standard root about the root information created in the process 1 mentioned above using drawing 10 to the transportation root master in an order entry system.
[0141] In addition, when judged with it being the standard root in the process 2 of this drawing 11 , process 3a shown in drawing 12 is performed. On the other hand, when judged with it being the root outside a standard, process 3b shown in drawing 13 is performed.
[0142] First, process 3a shown in drawing 12 is performed once in Step 142 of above-mentioned drawing 5 in three months, when judged with it being the standard root in a process 2. This process 3a processes cost information addition (plan unit price) to the standard root. This planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, such planned value is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.
[0143] Next, when judged with process 3b shown in drawing 13 being the root outside a standard in the above-mentioned process 2, it is periodically made once at Step 142 of above-mentioned drawing 5 in three months. Moreover, processing of this process 3b is processing of the cost information addition (plan unit price) to the root outside a standard. Moreover, this planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, this is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.
[0144] Then, the processing shown by drawing 14 made at Step 118 of above-mentioned drawing 5 - drawing 17 is explained.
[0145] First, drawing 14 is the same as that of the root connection processing mentioned above in drawing 10 , however is made once periodically in one month. Also about the method of this root connection, or the conditions in this case, it is the same as that of above-mentioned drawing 10 .

[0146] Then, in drawing 15 , it is the judgment of whether it is the standard root made like processing of above-mentioned drawing 11 , or to be the root outside a standard. As processing of drawing 11 mentioned above, processing of this drawing 15 is periodically made once to being made once in three months in one month. Moreover, when judged with it being the standard root in the process 15 of this drawing 15 , process 6a of drawing 16 is performed. On the other hand, when judged with it being the root outside a standard, process 6b of drawing 17 is processed.
[0147] First, in process 6a of drawing 16 , cost information addition (actual result unit price) to the standard root is processed once periodically in one month. This compares a plan unit price with an actual result unit price to the actual result of having passed the standard root. The factor of a physical distribution cost rise can be explored by this. In addition, it is made to acquire an actual result value from a host system 10 every month. Moreover, processing of such cost information addition (actual result unit price) is made to the data for every transportation path.
[0148] Then, process 6b of drawing 17 processes cost information addition (actual result unit price) to the root outside a standard periodically once in one month. It is for saying that this compares a plan unit price with an actual result unit price to the actual result of having passed the root outside a standard, and exploring the factor of physical distribution cost elevation. An actual result value is incorporated from a host system 10 like [b / this process 6] the above-mentioned process 6a every month. Moreover, the processing about the cost information addition (actual result unit price) performed is made for every transportation path.
[0149] Then, drawing 18 - drawing 23 explain the display screen in this operation gestalt.
[0150] First, drawing 18 is a flow chart which shows the flow of selection of each screen shown by drawing 19 - drawing 23 .
[0151] As shown in Step 180 of this drawing 18 , the initial screen of this operation gestalt is a reference condition input screen shown in drawing 19 . As continuously shown in Step 182 based on the data inputted on this reference condition input screen, the customer different-thing style cost reference key screen shown in drawing 20 is displayed. Moreover, based on the input made on this customer different-thing style cost reference key screen, the customer different-thing style cost reference **** detailed screen shown in drawing 21 of Step 184 or the root information screen classified by customer shown in drawing 22 of Step 186 is displayed. Moreover, according to the input in this root information screen classified by customer, the root information **** detailed screen classified by customer shown in drawing 23 of Step 188 is displayed.
[0152] The customer root information data shown in drawing 7 or drawing 8 can be created applying the 1st invention of the above in this operation gestalt, and information offer by the screen as shown in drawing 19 based on these customer root information data - drawing 23 can be performed as explained above. Moreover, since various data are constituted in this case, applying the 2nd invention of the above, it is possible storage capacity to be not only more reducible, but to process reference etc. more efficiently. Therefore, transportation of the transportation object whose order was received in the operating section according to this operation gestalt, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, the outstanding effect that the effort for managing physical distribution business and curtailment of costs can be aimed at can be acquired.
[0153] The information about the physical distribution of the primary transportation which was being distributed especially conventionally and secondary transportation can be referred to in the form connected as the consistent transportation root. For example, though a form changes before and after processing occurred, or there is a timing difference of transportation, change and the timing difference of these forms can be absorbed, a transportation path can be traced one by one, and the transportation root can be created. Moreover, the physical distribution cost of an in-the-hall product, a primary outside-the-hall transportation cost, and a secondary outside-the-hall transportation cost can grasp now more easily for every created transportation root.
[0154] Moreover, physical distribution cost can be referred to by the standard root and the root outside a standard about the transportation root, respectively. Moreover, physical distribution cost can be more finely grasped from a operating section. Furthermore, in a physical distribution section, since the plan physical distribution cost and actual result physical distribution cost for every transportation root can be referred to more easily, for example, and since the items of these physical distribution cost according to the transportation means exception, existence, a conveying distance of relay station, etc. can be referred to more easily, it becomes possible to advance the improvement activities of physical

distribution cost better.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

MEANS

[Means for Solving the Problem] First, the physical distribution cost management method of the 1st invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which it is shown whether it is the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel used for paying In case the customer root information data for grasping the aforementioned customer root are created First, find out the aforementioned last transportation path which delivery to a consumer completed, and the customer root which results in this last transportation path is made into the information trace customer root. The transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path whose key according to transportation well informed person corresponds, and correspond While connecting pursuing from the aforementioned last transportation path one by one to the upstream of a transportation path and creating the root trace information data of this information trace customer root based on the aforementioned source data Collecting the information about the physical distribution cost of this information trace customer root from the aforementioned source data The aforementioned technical problem is attained by creating a customer root physical distribution cost data, and creating customer root information data from these roots trace information data and a customer root physical distribution cost data.
[0013] Moreover, in the physical distribution cost management method of the 1st invention of the above, convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer. Two or more different customer roots are managed, and the delivery terms specified by a consumer can be satisfied. and the transporter system of each transportation path is stabilized, and it is established, and the sum total covering the whole customer root of physical distribution cost [fewer] In the case of offer of the aforementioned customer root information data which discriminate as the standard customer root and are made according to specification by the key according to transportation well informed person, the one customer root in two or more aforementioned customer roots The customer root which was specified by this key according to transportation well informed person and which is the aforementioned standard customer root of transportation from transportation object dispatch-origin to a consumer, While attaining the aforementioned technical problem by having offered two or more aforementioned customer root information on the customer root which is not the aforementioned standard customer root, facilities are given more to analysis, such as finding out the better customer root in respect of physical distribution cost etc., and management.
[0014] On the other hand, the physical distribution cost management method of the 2nd invention of this application In the physical distribution cost management method of the customer root which consists of two or more transportation paths which embraced two or more transportation stages of the path which conveys the transportation object whose order was received in the operating section from a shipping agency to the last place of delivery of a consumer The transportation path data which have the key according to transportation well informed person and transportation path connection key for every aforementioned transportation path beforehand, While creating the source data containing a physical distribution cost data and the last transportation path information data in which the transportation path of the last which information data and delivery to a consumer completed by paying to a transportation operating personnel

used for paying is shown The physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel from these source data, By while cutting down the aforementioned payment information data for the physical-distribution-management database which has the operating key which gave facilities to the information retrieval of a operating operating personnel, and a transportation path connection key, and having made it create, cutting down the information which shows the kind of transportation object The physical distribution cost management method which can attain the aforementioned technical problem and which nearby arrangement was carried out, and cut down or decreased about required information is offered.

[0015] The relay station which exists in the physical distribution cost management method of the 2nd invention of the above in the middle of the customer root which conveys a transportation object from a shipping agency to the last place of delivery of a consumer is taken into consideration. Moreover, the primary transportation from a shipping agency to relay station, While attaining the aforementioned technical problem by having attained communalization of the aforementioned physical distribution key, the aforementioned operating key, and the aforementioned transportation path connection key by the secondary transportation from relay station to the last place of delivery of a consumer, arrangement and curtailment, or reduction of required information is aimed at further.

[0016] Hereafter, an operation of the 1st invention of the above and an operation of the 2nd invention of the above are explained to this order.

[0017] First, in the 1st invention of the above, while enabling it to offer consistently the information about all the customer roots of the path which conveys a transportation object from a shipping agency to the last place of delivery of a consumer, offer also of the information about the physical distribution cost of this customer root is enabled further simultaneously.

[0018] There are transportation path data which have from the former the key according to transportation well informed person and transportation path connection key which are dealt with for every transportation path, a physical distribution cost data, payment information data to a transportation operating personnel used for paying. This is because an transportation cost pays, and a bill is managed, or it pays for every transportation path and business is performed from the former. In the 1st invention of the above, to many data for such every transportation path, further, an applicable transportation path adds the last transportation path information data in which it is shown whether it is the last transportation path with which delivery to a consumer is completed, and is considering as source data. That is, the above-mentioned transportation path data, the physical distribution cost data, and the thing that pays and contains the last transportation path information data in addition to information data are called source data.

[0019] Here, the above-mentioned key according to transportation well informed person is for discriminating a transportation object. A physical distribution key and a operating key are contained in this key according to transportation well informed person, for example like the operation gestalt mentioned later.

[0020] For example, the physical distribution key mentioned later includes the information which discriminates works, the information called the physical distribution form which discriminates a transportation object, and the information which shows the last place of delivery of a transportation object, and the kind of transportation object is not only discriminable, but it can discriminate the transportation object of the same kind in a transport process mutually by the difference of the place of delivery etc.

[0021] Moreover, the information concerning a consumer so that it may mention later about a operating key, It has the information called the operating form which shows the kind of transportation object, and the information which shows the operating window which placed an order for the transportation object. The kind of target transportation object is not only discriminable, but the transportation object of the same form in a transport process is mutually distinguishable from the information about a consumer, the information about a operating window, etc. like the above-mentioned physical distribution key.

[0022] The above-mentioned transportation path connection key is information which shows the connection relation of each transportation path which constitutes the customer root. As mentioned above, the customer root is constituted by two or more transportation paths, for example, consists of transportation paths of various transportation stages, such as a transportation path of rail and road transportation by the truck, and a transportation path of the ocean transportation by the cargo boat. A transportation path connection key needs the information on the transportation path connection key which shows the connection relation of such each transportation path, and is shown with the operation gestalt mentioned later by each transportation path PA-PJ in the root trace information data of drawing 7 or drawing 8 etc.

[0023] The information on the transportation path connection key of transportation path PA-PJ of this operation gestalt

is constituted by the information about the partition of whether they are the information about leaving-the-garage facilities, the information about a loading port, the information about a discharging port, the information that shows the partition of whether to be being [it / primary transportation] the secondary transportation, and "****", or to be "manufacture." For example, a connection relation with other transportation paths which adjoin on the customer root can be grasped using the information about a loading port, or the information about a discharging port.
[0024] The above-mentioned physical distribution cost data is information which shows the physical distribution cost in each transportation path. You may include the costs paid to a carrier, the costs for maintaining the relay station which keeps a transportation object temporarily which may include the costs generated in the company, or are in the process from a shipping agency to the last place of delivery of a consumer in this physical distribution cost.
[0025] The above-mentioned pays and information data are the information for actually paying the generated physical distribution cost to a transportation operating personnel. It pays and this information that pays for information data, for example and shows a gestalt etc. to them is included.
[0026] Here, in case the customer root information data for grasping the customer root which conveys a transportation object from a shipping agency to a consumer in the 1st invention of the above, i.e., the information for showing so that the customer root can be grasped consistently as mentioned above, are created, the transportation path (the last transportation path) which delivery to a consumer completed is first found out using the aforementioned last transportation path information data. Here, the customer root which results in this last transportation path is defined as the information trace customer root. Next, the transportation path with which the two following conditions are satisfied is considered as the last transportation path, and it connects, pursuing from this transportation path one by one to the upstream of a transportation path. Moreover, a transportation path is connected, connecting one by one in this way, and the root trace information data of the customer root are created based on the above-mentioned source data.
[0027] (1) The 1st condition : the key according to this transportation well informed person agrees. For example, a physical distribution key and a operating key agree with the operation gestalt mentioned later.
[0028] (2) The 2nd condition : the discharging port of a front transportation path and the loading port of a post-transportation path agree.
[0029] Next, in the 1st invention of the above, a customer root physical distribution cost data is created, collecting the information about the physical distribution cost of the above information trace customer roots from the above source data.
[0030] Moreover, customer root information data are created from the above-mentioned root trace information data and this customer root physical distribution cost data. If such customer root information data are obtained, the customer roots to the last place of delivery of a consumer can be covered [no], grasp of the consistent customer roots, such as via what transportation path to go, can come out as much as possible, and the information on the physical distribution cost about this customer root can also be offered. Therefore, the grasp of synthetic physical distribution cost about such the whole customer root becomes easier.
[0031] For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0032] In addition, although the 1st invention of the above is not limited to this, you may make it introduce the view of the standard customer root. That is, two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer are managed. Moreover, the customer root which satisfies the following conditions among such two or more customer roots is discriminated as the standard customer root.
[0033] (1) The 1st condition : the delivery terms specified by a consumer are satisfying.
[0034] (2) The 2nd condition : the transporter system of the transportation path which constitutes the customer root concerned should be stabilized, and be established.
[0035] (3) The 3rd condition : the sum total covering the whole customer root concerned of physical distribution cost should be the fewer or fewer one compared with other customer roots.
[0036] The view of such the standard customer root is introduced. In the case of the above offers of customer root

information data namely, in the case of offer of the customer root information data made according to specification by the key according to transportation well informed person It is made to perform offer with two or more customer roots of transportation from dispatch-transportation object specified by this key according to transportation well informed person origin to a consumer, the customer root which is the especially above-mentioned standard customer root, and the customer root besides the standard which is not the above-mentioned customer root.
[0037] Thus, it can make it possible to grasp more easily the difference among two or more different customer roots which convey the same transportation object from the same dispatch origin to the last place of delivery of the same consumer by introducing the view of the standard customer root. for example, -- usually -- the standard customer root -- using -- **** -- it is made like Moreover, if this customer root is compared with the above-mentioned standard customer root when the desirable customer root is able to be found out by a certain opportunity, evaluation by fields, such as evaluation of the found-out customer root concerned, for example, physical distribution cost etc., can be performed more easily. And when it becomes clear that this evaluated customer root is superior to the standard customer root in this time, the customer root concerned can also be used as the standard customer root from next time.
[0038] In addition, when the physical distribution cost of the actual result at the time of comparing the specific standard customer root with the other customer roots in this way varies, you may carry out actual result collection of the physical distribution cost of these standard customer root and the customer roots other than this in the periods during a predetermined period, for example, three months, etc. The more excellent customer root can be chosen as the standard customer root based on the actual result collection made in this way.
[0039] Next, an operation of the 2nd invention of the above is explained.
[0040] Although not limited to this, **** 2 invention needs to deal with much data, when [, such as a case of the 1st invention of the above,] showing the information covering all the customer roots to the last place of delivery of a consumer. Under the present circumstances, it not only constitutes such data in an optimum more, but it can aim at unnecessary or curtailment of the storage capacity of equipment which it not only can improve the efficiency of the processing which relates to for example, the 1st invention of the above by excluding data without use frequency, but performs such processing.
[0041] For this reason, **** 2 invention is considering the composition of the information and data which are used for a physical distribution cost management method. Moreover, in such a physical distribution cost management method, the point that arrange a transportation means or reference and grasp of physical distribution cost are made not only for the physical distribution section which performs various business about this but for a operating section [which placed an order for the transportation object], and works side is noted. Moreover, it considers also about the content of the source data which it generally has from the former.
[0042] First, as the 1st invention of the above generally also made reference as a certain source data from the former, there are transportation path data which have the key according to transportation well informed person and transportation path connection key for every transportation path, a physical distribution cost data, and payment information data to a transportation operating personnel used for paying. In addition to these data, by **** 2 invention, it is premised on the source data containing the last transportation path information data which were mentioned above.
[0043] In consideration of use frequency, reference efficiency, etc., the physical distribution key which gave facilities to the information retrieval of a physical distribution operating personnel, and the operating key which gave facilities to the information retrieval of a operating operating personnel are generated from such source data especially by **** 2 invention. Moreover, in addition to these physical distribution key and a operating key, the physical-distribution-management database which has a transportation path connection key is created. Moreover, in the case of creation of this physical-distribution-management database, while paying and cutting down information data, the information in the above source data which shows the kind of transportation object is decreased more.
[0044] Since the amount of data with which the physical-distribution-management database concerned is equipped is cut down by this, it not only can reduce storage capacity, but it can improve the processing speed in the case of the information retrieval by the physical distribution operating personnel, the operating operating personnel, and the person in charge of works.
[0045] In addition, with the information which shows the kind of the above-mentioned transportation object, an "order form", a "operating form", a "physical distribution form", etc. correspond in the operation gestalt mentioned later.
[0046] According to **** 2 invention, the information superior to the time's of realizing a physical distribution cost management method can be constituted as explained above. For this reason, unnecessary information can also be cut

down and the storage capacity of a means to memorize information can be stopped. Furthermore, the processing efficiency at the time of offering information can also be improved. For this reason, while giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from the dispatch origin of transportation of the transportation object whose order was received in the operating section to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management, about information required for this reason, nearby arrangement can be carried out and it can cut down, and while aiming at curtailment of physical distribution cost, the effort for managing physical distribution business and curtailment of costs can be aimed at.
[0047] In addition, although **** 2 invention is not limited to this, it may take into consideration the relay station which exists in the middle of the customer root. This relay station is process in which a transportation object is conveyed to the last place of delivery of a consumer, and is a place which keeps a transportation object temporarily. Such relay station is prepared in an every place region with a consumer, or the key point on the way of transportation, is a thing and is arranged for the purpose of reservation of the time for delivery to a consumer etc. When preparing such relay station, generally, it may consider as the jurisdiction by the side of works before relay station, and may consider after relay station as jurisdiction of a operating section etc. Thus, if jurisdiction differs, the key information for generally searching the information about a transportation object may differ. However, in case relay station is taken into consideration in this way in **** 2 invention, you may make it attain communalization of the physical distribution key mentioned above, a operating key, and a transportation path connection key by the primary transportation from a shipping agency to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Thus, if communalization is attained, relay-station order cannot be asked but information retrieval of a physical distribution operating personnel can also be performed both more easily [the information retrieval of a operating operating personnel].
[0048] In addition, about **** 2 invention, the transportation path connection key, physical distribution key, and operating key which were mentioned above are not limited in detail. For example, the information which distinguishes the information which shows distinction of whether to be "****" and "manufacture" about the above-mentioned transportation path connection key, the information which shows the loading port of a transportation object, the information which shows a discharging port, the information which shows leaving-the-garage facilities, and primary transportation and secondary transportation may constitute. For example, the information which shows the works which ship the above-mentioned physical distribution key, the information on a physical distribution form which shows the form of a transportation object, and the information about a transportation means to use, for example, the information about truck line distance or transportation facilities, may constitute. Moreover, the information which shows the consumer which placed an order for the transportation object, the information which shows the operating window which dealt with this order, and the information on a operating form which shows the target kind of transportation object may also constitute the operating key mentioned above. Although both the above-mentioned physical distribution forms and operating forms show the kind of target transportation object here, you may set up suitable for information retrieval from a operating section suitable for information retrieval from a physical distribution section, respectively.
[0049]
[Embodiments of the Invention] Hereafter, the operation gestalt of the physical distribution cost managerial system with which the 1st invention of the above and the 2nd invention of the above were applied is explained in detail using drawing.
[0050] First, the premise of the physical distribution cost managerial system of this operation gestalt is explained.
[0051] Severity of in recent years physical distribution environment has been increasing more the correspondence to the problem and global environment problems of a labor shortage etc. Considering coping with it to these, it is expected that future physical distribution cost increases increasingly.
[0052] On the other hand, reduction of physical distribution cost is approached at the limitation by the conventional "rationalization inside the physical distribution section for the made product." Therefore, it is necessary to consider as the object of a cost cut of physical distribution cost [before product manufacture (for example, the raw material stage of a product)], and reduction of the physical distribution cost with which sale / production section was united is needed.
[0053] For reduction of such physical distribution cost, it becomes important to work on sale / production section and to cut down physical distribution cost. For this reason, the aim of the physical distribution cost managerial system of

this operation gestalt is as follows.
[0054] (1) A selling section enables it to perform the operating activities in consideration of physical distribution cost. For that, a operating section is easily obtained in the information about the physical distribution cost according to customer root.
[0055] (2) In case a physical distribution section decides upon profit planning, enable it to grasp physical distribution cost information more easily at various cut ends (a form, transportation facilities or a transportation area, etc.).
[0056] Here, an object [gestalt / operation / this] is a physical distribution in the steel industry, and it can be classified as follows.
[0057] (1) The classification according to the kind of transportation object : a raw material physical distribution, a molten-iron physical distribution, a steel-manufacture physical distribution, a half-finished-products physical distribution, a product physical distribution, a recovery physical distribution.
[0058] (2) The classification of the physical distribution the physical distribution in an iron mill, or outside an iron mill : the physical distribution in works, the physical distribution outside works.
[0059] (3) The classification by the classification on accounting : **** expense, a manufacturing cost.
[0060] In the above classifications, classification with **** expense and a manufacturing cost is enabled for the product physical distribution with this operation gestalt for the physical distribution in an iron mill, and the physical distribution outside an iron mill. Here, in the classification by the kind of transportation object, other portions except a product physical distribution are managed at each works, respectively, and the analysis of physical distribution cost in the hall is possible for them. Therefore, if the physical distribution cost about a product physical distribution is grasped in this way, it comes to be able to perform management of whole company physical distribution cost [-like in common].
[0061] Here, when a product physical distribution is considered, it can classify into an in-the-hall physical distribution, the primary transportation from works to relay station, and the secondary transportation from relay station to the last place of delivery of a consumer. Here, about the portion of an in-the-hall physical distribution, the data of an in-the-hall physical distribution system (sign 13 of drawing 1) are made into source data. On the other hand, about the outside-the-hall physical distribution, about primary transportation, the data of a primary transportation cost payment system (sign 15 of drawing 1) are made into source data, and the data of a secondary transportation cost payment system (sign 16 of drawing 1) are made into source data about secondary transportation.
[0062] As transportation facilities set as the object of primary transportation, a coaster, a truck, a small vessel, **, a freight car, etc. are colorful, and fee calculation also changes with each transportation facilities. On the other hand, as secondary transportation, fee calculation is performed for every work of the cargo work after relay-station warehousing, storage, and delivery. Therefore, data not only are distributing in two or more databases, but the handling units of each data differ in the primary transportation cost payment system or the secondary transportation cost payment system. That is, primary transportation is an invoice unit for every transportation path of each transportation stage. About secondary transportation, it is the leaving-the-garage vote unit of the last delivery to the last place of delivery of a consumer. Therefore, compared with primary transportation, the data of the secondary transportation which covers the last delivery of a handling unit are more finer. In addition, about the in-the-hall physical distribution, the data about a physical distribution are dealt with per form, and incorporate and use this also with this operation gestalt.
[0063] The fundamental view of construction here of the physical distribution cost management method of this operation gestalt is the following four points.
[0064] (1) :in the hall [which is consistent and grasps the product transportation including primary transportation and secondary transportation about in the hall, outside the room, and outside the room] -- setting -- primary transportation outside the hall -- setting -- moreover, secondary transportation outside the hall -- setting -- etc. -- the whereabouts is distributing the actual result data about a physical distribution, and the timing of transportation also differs In addition, when processing is added at a transportation place, a configuration and a form also change. For this reason, it was difficult to be conventionally consistent and to grasp from factory shipments to the last place of delivery of a consumer.

[0065] (2) Grasp of the physical distribution cost information according to consumer (an actual result and standard) : the conventional physical distribution cost information is grasped for every management key of a physical distribution section. For this reason, in order for a operating section to grasp physical distribution cost for example, according to a

customer, the information on a physical distribution section had to be processed anew. With this operation gestalt, the management key (it is a management key about a marketing department, a group, a customer, etc., and considers as a operating key) which gave facilities to the information retrieval of the operating personnel of a operating section with the management key (physical distribution key) which gave facilities to the information retrieval of the operating personnel of a physical distribution section is given to the information about the physical distribution cost to treat. For this reason, the physical distribution cost information with which this operation gestalt is equipped can be offered also to a operating section with the gestalt for which were more [more easily and] suitable also as opposed to a physical distribution section.

[0066] (3) Diversification of information offer of the actual result about a physical distribution : when advancing physical distribution increase in efficiency and going, physical distribution cost etc. grasps more easily the actual result of the physical distribution in the present condition from various directions. With this operation gestalt, since various information offer screens (drawing 19 mentioned later - drawing 23) are improved, it excels in this point.

[0067] Hereafter, the composition of the physical distribution cost managerial system of this operation gestalt is explained.

[0068] Drawing 1 is the block diagram showing the composition of the physical distribution cost managerial system of this operation gestalt, and the host system which offers source data to this.

[0069] The composition of the physical distribution cost managerial system 40 of an operation gestalt with which the 1st invention of the above and the 2nd invention of the above were applied is shown by this drawing 1 . Furthermore, the composition of the host system 10 which offers the source data which this physical distribution cost managerial system 40 needs is shown.

[0070] First, the physical distribution cost managerial system 40 consists of a server computing system 42 and many terminal computing systems 51-56. These servers computing system 42 and the terminal computing systems 51-56 are constituted by each on EWS (engineering workstation), and are mutually connected by LAN (local area network)43.

[0071] This LAN43 is Ethernet specifically used abundantly by EWS. the terminal computing systems 51-56 connected by this LAN43 are illustrated depending on the case -- it has six or more sets and is arranged in the head office physical distribution planning department (physical distribution section), head office business (operating section), each branch (it is mainly a operating section and there is also an element of a physical distribution section), the Chiba iron mill, the Mizushima iron mill, and the Chita factory (above, works) Here, two or more terminal computing systems may be arranged in each arrangement place. For example, the head office physical distribution planning department may be equipped with two or more terminal computing systems. Moreover, the terminal computing system 53 is arranged at each of each branch.

[0072] Next, as shown in this drawing 1 , it is constituted by the server computing system 42 with the main part 60 of a computer, and the cost-data base 63 classified by customer root and the profit-planning database 64.

[0073] The main part 60 of a computer updates the data of the profit-planning database 64 while updating the data of the cost-data base 63 classified by customer root based on the source data of the order entry system 12 with which a host system 10 is equipped, the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15, and the secondary transportation cost payment system 16. Download of the source data shown by S1 is specifically performed periodically in (1 time / three months), and download of the source data shown by signs S2 and S3 and S4 is performed periodically [(time / 1 //) month]. Thus, based on the downloaded source data, the main part 60 of a computer performs renewal of the cost-data base 63 classified by customer root, and the profit-planning database 64.

[0074] An operation of the host system 10 of such composition and the physical distribution cost managerial system 40 is explained briefly.

[0075] First, the source data in a host system 10 are periodically downloaded on the main part 60 of a computer of the physical distribution cost managerial system 40. Based on the source data downloaded in this way, the main part 60 of a computer performs the creation and updating of the cost-data base 63 classified by customer root, and the profit-planning database 64 so that it may mention later in detail. Thus, construction of the cost-data base 63 classified by customer root and the profit-planning database 64 constitutes the information offer system (physical distribution cost managerial system) by which the 1st invention of the above and the 2nd invention of the above were applied in the server computing system 42.

[0076] Then, the head office physical distribution planning department of a physical distribution section can acquire the

information about the physical distribution cost of a request required as a physical distribution operating personnel from the server computing system 42 using the terminal computing system 51. In the branch which is similarly a operating section, this Shamoto business of a operating section can acquire the information about physical distribution cost characteristic as a operating operating personnel from the server computing system 42 using the terminal computing system 53 using the terminal computing system 52. Moreover, the Chiba iron mill, the Mizushima iron mill, and the Chita factory which become a works side can acquire the information about physical distribution cost peculiar to a works side from the server computing system 42 using the terminal computing systems 54-56, respectively.
[0077] Then, it explains in more detail about the source data which the physical distribution cost managerial system 40 with which the above-mentioned host system 10 is equipped uses.
[0078] First, the source data with which a host system 10 is equipped especially which the physical distribution cost managerial system 40 needs have in principle composition shown in the following table. That is, source data are constituted by the key item KA and the data-division part DA. Moreover, the key item KA is paid with the physical distribution key KA1 as shown in the following table, the operating key KA2, and the connection key KA3, and is constituted by the key KA4. Moreover, about the data-division part DA, it is constituted with the data DA 1 equipped with weight information and cost information.
[0079]
[Table 1]
原始データ

KA：キー項目	KA1：物流キー（工場、物流品種、最終受渡場所）
	KA2：営業キー（需要家、営業窓口、営業品種）
	KA3：接続キー（出庫便、積地、揚地、1次2次輸送区分、販直／製造区分）
	KA4：支払キー 1次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件） 2次（契約番号、送状番号、請求年月日、荷扱い業者、受渡条件、入庫便、船名、置場）
DA：データ部分	DA1：重量情報、費用情報

[0080] In the source data mentioned above, especially the source data that are in the primary transportation cost payment system 15, and are used with the physical distribution cost managerial system 40 are constituted by the amount of [the key item KB and / DB] data division, as shown in the following table. Furthermore, the key item KB is paid with the physical distribution key KB1 as shown in the following table, the operating key KB2, and the connection key KB3, and is constituted by the key KB4. Moreover, the amount of [DB] data division have the data DB1 about delivery facilities. Here, about such source data of the primary transportation cost payment system 15, the loading port of the connection key KB3 turns into a place of shipment, and a discharging port serves as the place of delivery.
[0081]
[Table 2]
1次輸送費支払システム

KB：キー項目	KB1：物流キー	工場、物流品種、最終受渡場所
	KB2：営業キー	需要家、営業窓口、営業品種
	KB3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便
	KB4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件
DB：データ部分	DB1：配達便｛配達重量、配達費用（基本費用、その他費用）｝	

[0082] Next, the source data with which the secondary transportation cost payment system 16 is equipped and which the physical distribution cost managerial system 40 uses are constituted by the key item KC and the data-division part DC as shown in the following table. Moreover, the key item KC is paid with the physical distribution key KC1 as shown in the following table, the operating key KC2, and the connection key KC3, and is constituted by the key KC4. Moreover, about the data-division part DC, it has the data DC 1 in which the fixed cost about cargo work as shown in the following table, storage, delivery, maintenance of relay station, etc. is shown. In addition, by the connection key KC3 in the source data of the secondary transportation cost payment system 16, a loading port shows relay station, and a discharging port shows the place of delivery by it.

[0083]
[Table 3]
2次輸送費支払システム

KC：キー項目	KC1：物流キー	工場、物流品種、最終受渡場所
	KC2：営業キー	需要家、営業窓口、営業品種
	KC3：接続キー	販直／製造区分、積地（＝中継基地）、揚地（＝受渡場所）、出庫便
	KC4：支払キー	契約番号、送状番号、請求年月日、荷扱業者、受渡条件、船名、置場、入庫便
DC：データ部分	DC1：……	{荷役重量、荷役費用（基本費用、その他費用）}
	……	{保管重量、保管費用（基本費用、その他費用）}
	……	{配達重量、配達費用（基本費用、その他費用）}
	……	{固定費用}

[0084] Next, the data memorized by each database of the physical distribution cost managerial system 40 of this operation gestalt created based on the source data stated above are explained.
[0085] First, as shown in the following table, the data memorized at the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt have the following composition. That is, the data memorized at the cost-data base 63 classified by customer root are first constituted by the key item KD and the data-division part DD. Moreover, it is constituted by the physical distribution key KD1 as shown in the following table, the operating key KD2, and the connection key KD3 about the key item KD. About the data-division part DD, it is constituted with the data DD 1 about primary transportation, and the data DD 2 about secondary transportation.
[0086]
[Table 4]
物流コスト管理システム（顧客ルート別コストデータベース）

KD：キー項目	KD1：物流キー	工場、物流品種（小分類・大分類）、最終受渡場所
	KD2：営業キー	需要家、営業窓口、営業品種
	KD3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便、1次2次輸送区分
DD：データ部分	DD1：＜1次輸送＞	配達便、配達重量、配達費用（基本費用、その他費用）
	DD2：＜2次輸送＞	荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用

[0087] Next, the data memorized by the profit-planning database 64 in the physical distribution cost managerial system 40 serve as composition as shown in the following table. That is, it is constituted by the amount of [the key item KE and / DE] data division. Moreover, the key item KE is constituted by the physical distribution key KE1 as shown in the following table, the operating key KE2, and the connection key KE3. Moreover, about a part for data division DE, it is constituted with the data DE1 about primary transportation, and the data DE2 about secondary transportation.
[0088]
[Table 5]
物流コスト管理システム（利益計画データベース）

KE：キー項目	KE1：物流キー	工場、物流品種（小分類・大分類）、最終受渡場所
	KE2：営業キー	需要家、営業窓口、営業品種
	KE3：接続キー	販直／製造区分、積地（＝出荷地）、揚地（＝受渡場所）、出庫便、1次2次輸送区分
DE：データ部分	DE1：＜1次輸送＞	配達便、配達重量、配達費用（基本費用、その他費用）
	DE2：＜2次輸送＞	荷役重量、荷役費用（基本費用、その他費用） 保管重量、保管費用（基本費用、その他費用） 配達重量、配達費用（基本費用、その他費用） 固定費用

[0089] Unlike the fundamental source data mentioned above, the source data in the primary transportation cost payment system 15, and the source data in the secondary transportation cost payment system 16, the data KA4, KB4, and KC4 related for paying, for example, payment keys, are excluded by the data in the cost-data base 63 classified by customer root, and the data in the profit-planning database 64 as explained above. At source data, although such data related for paying have a huge amount, since such information related for paying is excluded, in the cost-data base 63 classified by these customer root, or the profit-planning database 64, the processing time which aims at curtailment of storage capacity and reference takes can be shortened.
[0090] Moreover, compared with the physical distribution form and operating form in source data, the classification of the physical distribution form of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt or the profit-planning database 64 or a operating form is made rougher so that it may mention later in detail. For this reason, it not only can decrease the amount of the data in which the physical distribution form and operating form in this operation gestalt are shown, but it can perform reference better.
[0091] Moreover, as compared with mutual, the table showing the data memorized at the cost-data base 63 classified by customer root mentioned above and the table showing the data memorized by the profit-planning database 64 are made the same [the key about primary transportation and the key about secondary transportation] so that clearly. Therefore, it is also possible to search the data about primary transportation and the data about secondary transportation at once, using a common key.
[0092] Next, the generation and updating of the data of the cost-data base 63 classified by customer root or the data of the profit-planning database 64 in this operation gestalt are explained from the source data in a host system 10.
[0093] First, drawing 2 is the diagram showing the data generation and updating of the database of this operation gestalt based on source data.
[0094] In this drawing 2 , a host system 10 memorizes and the fundamental source data 18 used with the physical distribution cost managerial system 40 of this operation gestalt are shown. Moreover, the data memorized at the cost-data base 63 classified by customer root of this operation gestalt and the data memorized by the profit-planning database 64 are shown.
[0095] First, the physical distribution key KD1 memorized at the cost-data base 63 classified by customer root, the operating key KD2, the connection key KD3, the physical distribution key KE1 memorized by the profit-planning database 64, the operating key KE2, and the connection key KE3 are generated or updated based on the physical distribution key Kn1, the operating key Kn2, and the connection key Kn3 of source data 18, respectively. Here, n is B or C.
[0096] Next, a part for the data division DE 1 about the weight information and cost information of the profit-planning database 64 is generated or updated based on a part for the data division Dn 1 about the weight information and cost information of source data 18. On the other hand, the data about the weight information and cost information of the cost-data base 63 classified by customer root are generated based on a part for the data division DE 1 of the profit-planning database 64.
[0097] In addition, the data of the primary transportation cost payment system 15 of a host system 10 used for the generation or updating of the cost-data base 63 classified by customer root in the physical distribution cost managerial system 40 of this operation gestalt and the data of the secondary transportation cost payment system 16 are as follows.
[0098] (1) Customer root information (cost-data base classified by customer root)
The information 1A1. key item 1A1a. physical distribution key from 1 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
1A1b. operating key (a consumer, a operating window, operating form)
1A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1A2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
The information 1B1. key item 1B1a. physical distribution key from 1 transportation-cost [B.secondary] payment system (works, a physical distribution form, the last place of delivery)

1B1b. operating key (a consumer, a operating window, operating form)
1B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A part for 1 B-2. data division (the data with which a physical distribution key, a operating key, and a connection key agree from **** DB are incorporated.) However, about a weight and costs, it incorporates as a plan unit price and an actual result unit price.
[0099] Moreover, the data of the primary transportation cost payment system 15 of a host system 10 used for the physical distribution cost managerial system's 40 updating or generation of this operation gestalt of the data of the profit-planning database 64 and the data of the secondary transportation cost payment system 16 are as follows.
[0100] (2) Profit-planning information (profit-planning database)
The information 2A1. key item 2A1a. physical distribution key from 2 transportation-cost [A.primary] payment system (works, a physical distribution form, the last place of delivery)
2A1b. operating key (a consumer, a operating window, operating form)
2A1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are works and a subcontract place, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
It is 2A2a. delivery facilities {delivery weight and delivery-charge (basic costs, other costs)} by 2A2. data division.
The information 2B1. key item 2B1a. physical distribution key from 2B. transportation cost [secondary] payment system (works, a physical distribution form, the last place of delivery)
2B1b. operating key (a consumer, a operating window, operating form)
2B1c. connection key (leaving-the-garage facilities, a loading port, a discharging port, however a loading port are relay station, and a discharging port is the place of delivery.) The primary secondary transportation partitions, **** / manufacture partition
A 2B2. data-division part 2B2a. load weight, cargo work costs (basic costs, other costs)
A 2B2b. storage weight, an inventory carrying cost (basic costs, other costs)
A 2B2c. delivery weight, a delivery charge (basic costs, other costs)
2B2d. fixed costs (maintenance expense of relay station)
[0101] Next, how to generate the data (code) of a operating form and a physical distribution form from the data of an order form in the case of generation of the data of the cost-data base 63 classified by customer root of the physical distribution cost managerial system 40 of this operation gestalt and the data of the profit-planning database 64 or updating (code) is explained from source data.
[0102] First, if an order is received from a consumer in the operating section 67 as shown in drawing 3 , order form 67a will be published. This order form 67a is reached at no less than 1000 forms. Then, in the operating section 67, operating form 67b for using the physical distribution cost managerial system 40 of this operation gestalt is generated from order form 67a. This operating form 67b is about 75 forms. Therefore, the ratio (N2:1) of the number of the forms of order form 67a and operating form 67b is about 13.3 (N2 is about 13.3), and can decrease the number of forms or more by 1/13.
[0103] Then, in the physical distribution section 68, physical distribution form 68a for using the physical distribution cost managerial system 40 of this operation gestalt is generated based on order form 67a. This physical distribution form 68a is about 68 forms. Therefore, the ratio (N1:1) of the number of forms of order form 67a and physical distribution form 68a is about 14.7 (N1 is about 14.7), and can cut down the number of forms 1/14 or more.
[0104] In addition, the conversion method of operating form 67b from order form 67a and the conversion method of physical distribution form 68a from order form 67a are as in the following table.
[0105]
[Table 6]

品種コードの変換方法

名称	使用部署	品種の数	変換方法	目的／内容
M1．オーダ品種	営業部門	1000		契約をする際に発番される契約番号の２～４桁で決まる
M2．営業品種	営業部門	７５	オーダ品種と工場コードと国内・輸出区分コードで変換	営業の販売計画の管理レベルに合わせた品種
M3．物流品種	物流部門	６８	オーダ品種と工場コードで変換	物流コストを意識した管理レベルに合わせた品種

[0106] In addition, the order form as shown in drawing 4 has the following composition.
[0107] (1) The code which shows the contract ground domestic outside the country using the contract ground code alphanumeric character of one character.
[0108] (2) The component kind code of a form code (3 figures) = it is as being shown in the 1 of the table of the "order form code" which roll partition (1 figure) + forms (2 figures) are consisted of, and is shown below, and its 2. In addition, the code currently displayed just before each form name of 1 of ******** and its front Naka of 1 expresses the following.
"K" -- "domestic S" -- in-house "Y -- Order entry mechanization non-object [0109]" -- Domestic, in the company, export community "*" -- Export "a blank" (3) consecutive numbers -- under the treaty of [G] a., in case it contracts, it is numbered
b. It is considered and numbered so that it may avoid that a number overlaps within a short period of time.
c. A "serial number" may be beforehand divided for the reason of an area, department and section, and others.
d. Grouping of the head number of two or more kinds is carried out, and it is not restricted except for a special case about attaching consecutive numbers.
[0110]
[Table 7]

オーダ品種コード（その1）

ロール区分 / 品種		圧延製品										
		0		1		2		3		4		
				ニューロール		ニューロール		山売・格外・3級		ニューロール		
厚板	30				極厚鋼板	K S	極厚鋼板 シャー向け耳付	K S				
	31				造船材	K S	造船材 シャー向け耳付	K S	造船乱尺及び切断フラットバー乱尺	K S	切断フラットバー（大板切断品）	
	32				ボイラー材	K S		K S	ボイラー乱尺			
	33				厚板一般材	K S	厚板一般材 シャー向け耳付	K S	厚板一般材乱尺 山売り・3級	K S	厚板一般材 カット・バー	
	34				中板一般材	K S	中板一般材 シャー向け耳付	K S	中板一般材乱尺 山売り・3級	K S	中板カット・バー	
	35				縞鋼板		縞鋼板コイル	K S	縞鋼板・乱尺 山売り・3級			
	36				特殊極厚鋼板	K S	特殊極厚鋼板 シャー向け耳付	K S	特殊極厚鋼板 在庫品			
	37				調質厚鋼板	K S	調質厚鋼板 シャー向け耳付	K S	調質厚鋼板 在庫品	K S	調質鋼カット・バー	
	38				厚板クラッド	K S		K S	厚板クラッド 在庫品			
	39				特殊鋼厚板	K S	特殊鋼厚板 シャー向け耳付	K S	特殊鋼厚板 在庫品	K S	特殊鋼カット・バー	

[0111]
[Table 8]

オーダ品種コード（その２）

品種＼ロール区分		圧延製品		加工品		工事込契約				その他	
		5		6		7		8		9	
		発生品端板短尺									
厚板	30										
	31										鋳鋼
	32										Ｖプロ
	33		厚板一般材端板		厚板ブランク材						特殊鋼鋳物
	34	K	中板一般材端板		中板ブランク材						銅合金鋳物
	35	K S	鋳鋼板端板								
	36				鋼板						鋳鋼ロール
	37										
	38			*	鋼板製高架水槽						
	39			*	その他加工品						鋳鋳鋼組立品

[0112] Operating form 67b changed from order form 67a is in addition, as it is shown in the following table (the 1 of the table of a "operating form code", and its 2). In addition, this order form 67a is another system in domestic, in the company, and export.

[0113]

[Table 9]

営業品種コード（その１）

NO	品種・Ｉ　〔国内〕	コード
1	厚中板　（造船材）	０１
2	厚中板　（一般材）	０３
3	鋳板	０６
4	特殊鋼広巾厚板	１１
5	特殊鋼中薄板	１２
6	特殊鋼帯鋼　（千葉・水島）	１４
7	特殊鋼帯鋼　（阪神）	１５
8	特殊鋼平鋼	１６
9	特殊鋼極厚鋼板	１７
１０	特殊鋼スラブ　（ＧＣ）	１８

[0114]

[Table 10]

営業品種コード（その２）

NO	品種・Ｉ　〔国内〕	コード
１１	厚板クラッド	１Ａ
１２	ステンレス HOT KE	２０
１３	ステンレス HOT KK	２１
１４	ステンレスコールドKE（ZR品）	２７
１５	ステンレスコールド KK　（ZR品）	２８
１６	ステンレスクラッド	２９
１７	ステンレスパイプ	２Ａ
１８	ステンレスコールド KE　（TANDEM品）	２Ｃ
１９	ステンレスコールド KK　（TANDEM品）	２Ｄ

[0115] As [show / physical distribution form 68a changed from order form 67a / in addition, / in the following table] (the 1 of the table of a "physical distribution form code", and its 2)

[0116]

[Table 11]

物流品種コード（その１）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
1	厚板	A	1	厚板	A1△△
			2	厚板端板	A2△△
2	熱延	B	3	熱延特殊コイル	B1BB
			4	熱延　コイル	B1△△
			5	熱延特殊薄板	B2BS
			6	熱延特殊厚板	B2BN
			7	熱延　薄板	B2△△
3	冷延	C	8	冷延特殊コイル	C1CB
			9	冷延　コイル	C1△△
			10	冷延特殊薄板	C2CH
			11	冷延　薄板	C2△△
			12	コールド特品	C3△△
4	表面処理	D	13	ブリキ	D1△△
			14	ティンフリー	D2△△
			15	カラートタン	D3△△
			16	亜鉛メッキ	D4△△
			17	溶融亜鉛メッキ	D5△△
			18	電気亜鉛メッキ	D6△△
			19	ジンクロメタル等	D△△△
5	珪素	E	20	珪素	E△△△
6	ステンレス	F	21	ステンレス	F△△△
			22	ステンレス特品	F5△△
7	形鋼	G	23	大形形鋼	GA△△
			24	中形形鋼	GB△△
			25	大形鋼矢板	GC△△
			26	支保工	GE△△
			27	ＣＴ形鋼	GH△△
			28	組み合わせ鋼矢板	GT△△
			29	軽量ロールH	GW△△
			30	大形ハイスレンドH	G4△△
			31	中形ハイスレンドH	G6△△
			32	フォークリフトマスト	G5△△
			33	大和H	GZ△△
		（Ｊ1）	34	大形フラットバー	J1△△
			35	その他形鋼	G△△△
8	線材	H	36	線材	H△△△
			37	バーインコイル	H2△△
9	棒鋼	Ｊ（Ｊ1を除く）	38	棒鋼	J△△△

[0117]
[Table 12]

物流品種コード（その2）

物流利計定期帳票メッシュ			物流利計メッシュ		
NO	名称	コード	NO	名称	コード
10	シームレス鋼管	K1	39	小径シームレス	KQ△△
			40	小径シームレス塗覆管	KR△△
			41	中径シームレス	KJ△△
			42	中径シームレス塗覆管	KK△△
11	溶鍛接管	K2	43	小径管	KN△△
			44	小径管塗覆管	KP△△
			45	中径管	KG△△
			46	中径管塗覆管	KH△△
			47	鍛接管	KL△△
			48	鍛接塗覆管	KM△△
			49	コラム	KS△△
12	大径管	K3	50	スパイラル	KE△△
			51	スパイラル塗覆管	KF△△
			52	板巻鋼管	KC△△
			53	板巻鋼管塗覆管	KD△△
			54	UOE	KA△△
			55	UOE塗覆管	KB△△
13	鋳鍛鋼	L	56	鋳鍛鋼	L△△△
14	溶接棒	M	57	溶接棒	M△△△
15	鉄粉	N	58	鉄粉	N△△△
16	コルゲート	P	59	コルゲート	P△△△
17	鋼材半製品	R	60	ビレット	R1△△
			61	スラブ	R2△△
			62	鋳物銑	R5△△
			63	その他鋼材半製品（ブルーム・鋼塊・製鋼溶銑）	R△△△
18	その他鋼材	S	64	ソケット	SA△△
			65	照明柱	SB△△
			66	電柱	SC△△
			67	照明鉄塔	SS△△

[0118] In this operation gestalt, the number of forms of operating form 67b changed from order form 67a is cut down by about 1/13 compared with order form 67a as explained above. Moreover, compared with order form 67a, it has dropped to about 1/15 also about the number of forms of physical distribution form 68a changed from order form 67a. Therefore, shortening of the processing time which it not only can reduce storage capacity more, but reference takes it can also be aimed at by cutting down the number of forms in this way.

[0119] Next, generation of the customer root information data made with the physical distribution cost managerial system 40 of this operation form or processing of updating is explained, using a flow chart.

[0120] Drawing 5 is a flow chart which shows creation of the customer root information data made in the physical distribution cost managerial system of this operation form, or processing of updating.

[0121] In this drawing 5 , actual result collection processing is first made at Step 110. This actual result collection processing is performed periodically on a monthly predetermined day. In this actual result collection processing, distribution and incorporation of the download to the physical distribution cost managerial system 40 from the host system 10 as shown in drawing 6 described below, and the data to each database shown in drawing 6 are made.

[0122] Drawing 6 is a block diagram for download of the source data from a host system to each database in the physical distribution cost managerial system of this operation gestalt being shown.

[0123] In this drawing 6 , the 13 or primary in-the-hall physical-distribution-system transportation cost payment system 15 and the secondary transportation cost payment system 16 are formed in the host system 10 as mentioned above using drawing 1 . Moreover, in addition to this, the facilities database 26 and the secondary database 28 are formed in the main part 60 of a computer of the server computing system 42 in the physical distribution cost managerial system 40 of this operation gestalt the 25 or primary 24 or primary 21 or primary in-the-hall database ship database truck database.

[0124] Moreover, the source data of the in-the-hall physical distribution system 13 are downloaded to the in-the-hall database 21, and are incorporated. The source data of the primary transportation cost payment system 15 are downloaded to the main part 60 of a computer in the server computing system 42, reach 24 or primary primary ship

database truck database 25, in addition to this, can be distributed to either of the facilities databases 26 the 1st order, and are incorporated. The source data of the secondary transportation cost payment system 16 are downloaded to the secondary database 28, and are incorporated.

[0125] Moreover, at this step 110, based on the incorporated source data, it downloads in this way, and the transportation physical distribution discernment key information data shown in the key information on the cost-data base 63 classified by customer root and the profit-planning database 64, i.e., drawing 7 mentioned later and drawing 8 , are generated, and it is shown in these drawing 7 and drawing 8 , especially carries out to some customer root information data.

[0126] Then, at Step 114, it judges whether it is the processing performed once in three months. If this judgment is "Y", it will mean that it was judged with performing processing which should be performed once in three months, and will progress to Step 142 continuously. When judged with "N" at this step 114, it means that it was judged with performing processing performed once in one month, and progresses to Step 118 continuously.

[0127] Then, the master file of the standard customer root is searched with Step 142, and it judges by the item of "the standard / root partition data outside a standard" of the high-order end of drawing 7 or drawing 8 in whether the customer root which conveyed is the standard customer root. The profit-planning database 64 is created at continuing Step 146.

[0128] On the other hand, when judged with "N" at the above-mentioned step 114, root actual result information creation is performed at Step 118. This, using the 24 or primary primary ship database truck database 25 shown in drawing 6 , and the data memorized by the primary facilities database 26 and secondary database 28 in addition to this The data of a transportation path are connected from the data of the last transportation path which delivery to a consumer completed, pursuing one by one to the upstream (works side) of a transportation path, and processing in which even the data of the transportation path which finally leaves works connect is performed. To the flow and reverse of such processing connected while carrying out a sequential trace, i.e., a transportation physical distribution, the data of a transportation path are connected one by one at reverse, and it dies. Such connection conditions are connected pursuing one by one for the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path key information, i.e., a physical distribution key, and whose operating key correspond, and correspond. By such processing, the root trace information data shown in drawing 7 or drawing 8 are obtained.

[0129] At Step 128, it judges whether it is the object of actual result collection of the standard customer root or the customer root outside a standard following this step 118. When judged with there being the root same in the past and it being the object of such actual result collection, it progresses to Step 130 continuously. On the other hand, when judged with it not being the object of actual result collection, it progresses to Step 124, considers as the object of next data accumulate lump, and considers as the object of next actual result collection.

[0130] Here, at Step 152, plan unit price addition is processed after the above-mentioned step 146. Or when it is judged with it being a candidate for actual result collection at the above-mentioned step 128 and progresses to Step 130, processing of actual result unit price addition and the amount addition of actual results is performed.

[0131] Here at these steps 152 and 130 While using key information, i.e., a physical distribution key, and a operating key as a search key, a root configuration item (the partition of facilities, a loading port, a discharging port, primary transportation, or secondary transportation, ****, or partition of manufacture) is used as a search key. It reaches 24 or primary 21 or primary in-the-hall database ship database truck database shown in drawing 6 25, in addition to this, the primary facilities database 26 and secondary database 28 are searched, and the unit price of each transportation path and the data of a weight are acquired. The edit place of the acquired information (a unit price, weight) is judged from the partition of the partition of facilities, primary transportation, or secondary transportation, ****, or manufacture.

[0132] Here, from the root of one set of a loading port and a discharging port, i.e., one transportation path, a plan unit price calculates the average of an actual result unit price in three months, and is called for. This is called for by carrying out the division of the sum total of the costs collected in three months in the amount similarly collected in three months.

[0133] moreover -- although it is good also as a plan unit price as it is in the actual result unit price for three months called for by doing in this way -- the actual result unit price for such three months -- receiving -- a rate -- the multiplication of the ratio which considered the contents of a cost cut, such as - increase in efficiency, is carried out, and it is good also considering this as a plan unit price a discount the ratio of such a content of a cost cut predicts change of the future actual result unit price for three months, and according to continuation order -- or the price

increase element by a certain factor is taken into consideration
[0134] Next, an actual result unit price is called for as an actual result unit price for one month based on actual result collection of the costs for one month made about the root of one set of a loading port and a discharging port, i.e., one transportation path, and actual result collection of the amount for one month. It becomes the actual result unit price required in specifically carrying out the division of the total of costs by which actual result collection was carried out in one month by total of the amount collected in one month calculated as average costs for one month.
[0135] After these steps 152 or processing of 130 is completed, to the customer root information data shown in drawing 7 , plan unit price information data or actual result unit price weight information data can be given, and customer root information data as shown in drawing 8 as a result can be obtained.
[0136] In addition, the processing made at Step 142 of above-mentioned drawing 5 is made as [show / in drawing 9 - drawing 13]. Moreover, the processing made at Step 118 which drawing 5 mentioned above is made as [show / by drawing 14 - drawing 17].
[0137] First, drawing 9 shows the source data made into the object of processing of Step 142, and each transportation path is isolated. First, the 1st transportation path is a transportation path from N1 (works) to N2a (relay station). The 2nd transportation path is a transportation path from N2b (relay station) to N3a (subcontract place). The 3rd continuing transportation path is a transportation path from N3b (subcontract place) to N4 (consumer). Here, each of N2a and N2b shows the same relay station. Moreover, each of N3a and N3b shows the same subcontract place.
[0138] Then, processing of the root connection of a process 1 made at the above-mentioned step 142 is shown by drawing 10 . This processing is performed once in three months. Moreover, processing of this root connection is processing in which connect the transportation path the discharging port of a pre-transportation path and whose loading port of a post-transportation path a physical distribution key and a operating key agree with the 3rd transportation path as the starting point with which the data that it was the last transportation path were given, and correspond one by one, and it finally arrives to shipment works. By such processing, from the 3rd transportation path, all transportation paths are connected, and the customer root which becomes with these transportation path can grasp even the 1st transportation path now consistently.
[0139] Drawing 11 is the process 2 made at Step 142, and judges the customer root besides a standard or a standard. This judgment is performed once periodically in three months. Moreover, this judgment judges. Moreover, such a judgment is made by the comparison with the customer root used as the object used as the actual result, and the root A (standard root) shown in drawing 11 , and comparison with Root B (root outside a standard). Moreover, the transportation gestalt of the standard root and the root outside a standard and comparison of a unit price are performed after such a comparison test. Grasp of the unusual root is made by this.
[0140] In addition, this process 2 judges whether it is the standard root about the root information created in the process 1 mentioned above using drawing 10 to the transportation root master in an order entry system.
[0141] In addition, when judged with it being the standard root in the process 2 of this drawing 11 , process 3a shown in drawing 12 is performed. On the other hand, when judged with it being the root outside a standard, process 3b shown in drawing 13 is performed.
[0142] First, process 3a shown in drawing 12 is performed once in Step 142 of above-mentioned drawing 5 in three months, when judged with it being the standard root in a process 2. This process 3a processes cost information addition (plan unit price) to the standard root. This planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, such planned value is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.
[0143] Next, when judged with process 3b shown in drawing 13 being the root outside a standard in the above-mentioned process 2, it is periodically made once at Step 142 of above-mentioned drawing 5 in three months. Moreover, processing of this process 3b is processing of the cost information addition (plan unit price) to the root outside a standard. Moreover, this planned value makes efficiency/rate reflect in the aforementioned actual result. Moreover, this is the root for every transportation path of a loading port and one set of discharging ports, i.e., data.
[0144] Then, the processing shown by drawing 14 made at Step 118 of above-mentioned drawing 5 - drawing 17 is explained.
[0145] First, drawing 14 is the same as that of the root connection processing mentioned above in drawing 10 , however is made once periodically in one month. Also about the method of this root connection, or the conditions in this case, it is the same as that of above-mentioned drawing 10 .

[0146] Then, in drawing 15 , it is the judgment of whether it is the standard root made like processing of above-mentioned drawing 11 , or to be the root outside a standard. As processing of drawing 11 mentioned above, processing of this drawing 15 is periodically made once to being made once in three months in one month. Moreover, when judged with it being the standard root in the process 15 of this drawing 15 , process 6a of drawing 16 is performed. On the other hand, when judged with it being the root outside a standard, process 6b of drawing 17 is processed.
[0147] First, in process 6a of drawing 16 , cost information addition (actual result unit price) to the standard root is processed once periodically in one month. This compares a plan unit price with an actual result unit price to the actual result of having passed the standard root. The factor of a physical distribution cost rise can be explored by this. In addition, it is made to acquire an actual result value from a host system 10 every month. Moreover, processing of such cost information addition (actual result unit price) is made to the data for every transportation path.
[0148] Then, process 6b of drawing 17 processes cost information addition (actual result unit price) to the root outside a standard periodically once in one month. It is for saying that this compares a plan unit price with an actual result unit price to the actual result of having passed the root outside a standard, and exploring the factor of physical distribution cost elevation. An actual result value is incorporated from a host system 10 like [b / this process 6] the above-mentioned process 6a every month. Moreover, the processing about the cost information addition (actual result unit price) performed is made for every transportation path.
[0149] Then, drawing 18 - drawing 23 explain the display screen in this operation gestalt.
[0150] First, drawing 18 is a flow chart which shows the flow of selection of each screen shown by drawing 19 - drawing 23 .
[0151] As shown in Step 180 of this drawing 18 , the initial screen of this operation gestalt is a reference condition input screen shown in drawing 19 . As continuously shown in Step 182 based on the data inputted on this reference condition input screen, the customer different-thing style cost reference key screen shown in drawing 20 is displayed. Moreover, based on the input made on this customer different-thing style cost reference key screen, the customer different-thing style cost reference **** detailed screen shown in drawing 21 of Step 184 or the root information screen classified by customer shown in drawing 22 of Step 186 is displayed. Moreover, according to the input in this root information screen classified by customer, the root information **** detailed screen classified by customer shown in drawing 23 of Step 188 is displayed.
[0152] The customer root information data shown in drawing 7 or drawing 8 can be created applying the 1st invention of the above in this operation gestalt, and information offer by the screen as shown in drawing 19 based on these customer root information data - drawing 23 can be performed as explained above. Moreover, since various data are constituted in this case, applying the 2nd invention of the above, it is possible storage capacity to be not only more reducible, but to process reference etc. more efficiently. Therefore, transportation of the transportation object whose order was received in the operating section according to this operation gestalt, While giving facilities to analysis, such as finding out grasp of the synthetic physical distribution cost from a shipping agency to the last place of delivery of a consumer, and the better customer root in respect of physical distribution cost etc., and management For this reason, while being able to carry out nearby arrangement, being able to cut down or decrease about required information and aiming at curtailment of physical distribution cost, the outstanding effect that the effort for managing physical distribution business and curtailment of costs can be aimed at can be acquired.
[0153] The information about the physical distribution of the primary transportation which was being distributed especially conventionally and secondary transportation can be referred to in the form connected as the consistent transportation root. For example, though a form changes before and after processing occurred, or there is a timing difference of transportation, change and the timing difference of these forms can be absorbed, a transportation path can be traced one by one, and the transportation root can be created. Moreover, the physical distribution cost of an in-the-hall product, a primary outside-the-hall transportation cost, and a secondary outside-the-hall transportation cost can grasp now more easily for every created transportation root.
[0154] Moreover, physical distribution cost can be referred to by the standard root and the root outside a standard about the transportation root, respectively. Moreover, physical distribution cost can be more finely grasped from a operating section. Furthermore, in a physical distribution section, since the plan physical distribution cost and actual result physical distribution cost for every transportation root can be referred to more easily, for example, and since the items of these physical distribution cost according to the transportation means exception, existence, a conveying distance of relay station, etc. can be referred to more easily, it becomes possible to advance the improvement activities of physical

distribution cost better.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] The block diagram showing the composition of the host system which provides with source data the physical distribution cost managerial system and this physical distribution cost managerial system with which the physical distribution cost management method of the 1st invention of this application and the 2nd invention was applied
[Drawing 2] The block diagram showing data generation of the cost-data base classified by customer root, and a profit-planning database, or the flow of updating from the source data in the aforementioned operation gestalt
[Drawing 3] The block diagram showing the process which generates a operating form and a physical distribution form from the order form in the aforementioned operation gestalt
[Drawing 4] The data block diagram of the order form used with the aforementioned operation gestalt
[Drawing 5] The flow chart which shows a creation update process of the customer root information data made with the aforementioned operation gestalt
[Drawing 6] The block diagram showing the composition of each database in the physical distribution cost managerial system which downloads source data each system in the aforementioned host system, and after this
[Drawing 7] The data block diagram showing the customer root information data of the 1st phase generated with the aforementioned operation gestalt
[Drawing 8] The data block diagram showing the customer root information data of the 2nd phase generated with the aforementioned operation gestalt
[Drawing 9] The diagram showing the data of the transportation path of the source data which constitute a certain customer root in the aforementioned operation gestalt
[Drawing 10] The diagram showing the process 1 of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 11] The diagram showing the process 2 of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 12] The diagram showing process 3a of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 13] The diagram showing process 3b of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 14] The diagram showing the process 4 of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 15] The diagram showing the process 5 of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 16] The diagram showing process 6a of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 17] The diagram showing process 6b of the processing about the root connection and the physical distribution cost in the aforementioned operation gestalt
[Drawing 18] The flow chart which shows the selection change of the display screen in the aforementioned operation gestalt
[Drawing 19] The diagram showing the reference condition input screen in the aforementioned operation gestalt